

# **An Integrated Model of the Factors Influencing the Purchasing Decision of UK Online Consumers**

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## **ABSTRACT**

In recent years, online shopping has become a popular choice for purchasing goods and services. The Office for National Statistics (2012) reported that 83.5% of the UK population now have access to Internet. Furthermore, adults who indicated that they had purchased or ordered goods or services online within the past twelve months has reached 32 million, which represents 66% of the UK adult population (Office for National Statistics, 2011). With the growth of Internet purchasing, recent studies have found various influences that can affect the online purchasing behaviour of consumers. Consequently, this represents a desirable marketing opportunity for businesses.

Past research in online shopping is quickly become outdated and hence there is a need to update and extend these studies (Delafronz, Paim and Khatibi, 2010; Doolin et al., 2005; Haque, Sadeghzadeh and Khaibi, 2006). As technology continues to improve and new trends start to form, it is important to develop a better understanding of the current online shopping population. Some past studies focused on a specific issue of online consumer behaviour but they differ in emphasis, hence there is a necessity for an integrated model of consumer behaviour with supporting empirical evidence.

The purpose of this study is to develop an understanding of the various influences that affect the decision of online shoppers to purchase in the United Kingdom. Semi-structured interviews were used to collect data in order to gain a detailed understanding of the various factors. Following the exploratory study (semi-structured interview), an online survey consisting of 983 respondents was conducted as the other data collection method for this study.

The findings from literature review (secondary data), semi-structure interviews (qualitative data) and questionnaire (quantitative data) reveal main influencing factors that affect a consumer's decision to purchase online. The factors were

identified as convenience, social, risk, product, and merchant factors. Through the analysis of the data, evidence was found to support the presence of relationships between factors, relationships between factors and online shopping, and the significant differences between the consumer's demographics and the various factors. Furthermore, the results suggest that different types of online consumers (casual, regular, and frequent) perceive the importance of each factors in a different manner. The findings in the study help facilitate in the development of the Integrated Model of Factors Influencing the Online Consumers. This model integrates the findings from the literature, semi-structured interviews, and the online survey to capture the factors that influence the online shoppers. Through understanding the factors that influence the online shoppers, this model can help online retailers and marketers to target their marketing activities and to develop appropriate strategies to convert potential consumers into actual buyers.

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# 1 INTRODUCTION

## **1.1 CHAPTER OVERVIEW**

This chapter outlines the motivation for this study together with the gaps identified in the literature review and reasoning for conducting this research. The aim and research questions will also be discussed along with the research strategy utilised for this study. The chapter ends with a brief introduction to the thesis structure.

## **1.2 INTERNET SHOPPING**

In recent years, rapid growth of online shopping has caught the attention of businesses and marketers. Many brick and mortar businesses are looking forward to gaining a competitive edge by entering the online market, resulting in an urgent need for those that have been using other marketing channels in the past to now also focus on the online business models.

Online shopping has been a hit for both consumers and businesses. Convenience, the ability of consumers to access a wider range of products and to compare prices with ease, all of which could be done anywhere twenty-four hours a day, seven days a week, are just some of the main reasons for its popularity among the consumers. Online shopping has also proven to be beneficial to businesses as it attracts more consumers; increases brand awareness and market; and reaches out to the customer who otherwise would not have been a purchaser in-store prior to the online shopping craze.

In recent years, online shopping has become a popular choice for purchasing goods and services. By the end of 2011, 83.5% of the UK population has used



the Internet (Office of National Statistics, 2012). According to the Office for National Statistics (2010), the number of UK adults using the Internet every day or almost every day had reached 30.1 million in 2010. This figure nearly doubled the estimated figure in 2006 of 16.5 million. As shown in Figure 1.1, the percentage of UK household that have access to the Internet have been increasing steadily from 57% in 2006 to 77% in 2011. Furthermore, adults who indicated that they had purchased or ordered goods or services online within the past twelve months reached 32 million, which represents 66% of the UK adult population (Office for National Statistics, 2011).

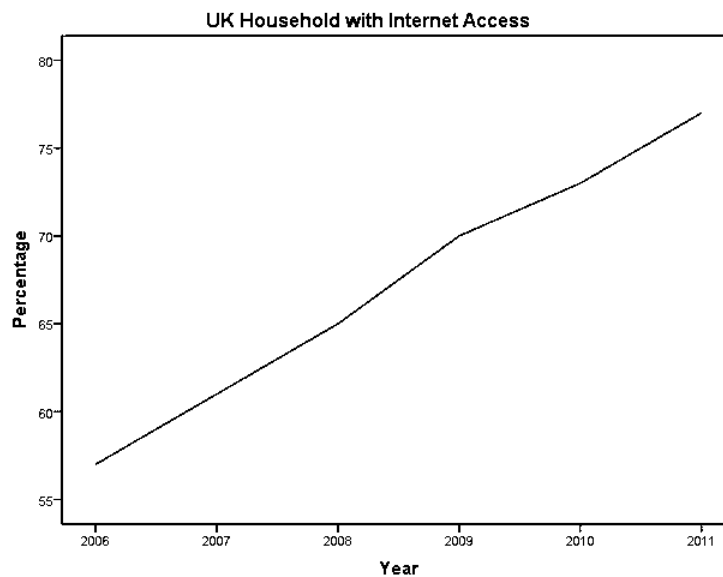


Figure 1.1. Percentage of UK Household with Internet Access

The growth of online shopping represents significant marketing opportunities for businesses. To benefit from such opportunities, marketers need to further their understanding of online consumer behaviour and develop marketing strategies that would assist them to convert potential consumers into actual buyers, while retaining existing consumers at the same time (Doolin et al., 2005; Vijayasarathy and Jones, 2000).

### **1.3 RESEARCH GAP**

Internet shopping is still at the early stage of development (Delafrouz, Paim and Khatibi, 2010). Past studies have attempted to identify different factors associated with Internet shopping but as the adoption of the Internet continues and the demographics of Internet user population diversify, there is a strong necessity to update and extend these studies (Doolin et al., 2005). While some previous research has present models of online consumer behaviour, they vary in their emphasis on the different aspects of Internet shopping. Integrated frameworks have been suggested by some research, but it is noted that overall, there has been a lack of empirical evidence supporting the theoretical findings (Karjaluoto, Mattila and Pento, 2002). Hence, it is suggested that Internet shopping is still at the early stage of development and hence consumers' attitudes and factors that influence their attitude is still largely unknown (Delafrouz, Paim and Khatibi, 2010; Haque, Sadeghzadeh and Khaibi, 2006).

The topic is always evolving due to the constant technological developments and the desire to improve the Internet offerings. Hence it is necessary to focus on the factors that affect the shopping behaviour of online consumers. The focus of this study is the e-commerce market in the United Kingdom as it has the largest online market in Europe. The Centre for Retail Research (2012) reported that UK consumers spent £50.3 billion online in 2011. Online sales in the UK now account for almost 12% of the total retail sales and this rapid growth is expected to continue. Consequently, UK is leading the world in terms of online share of the total UK retail sales market (Centre for Retail Research, 2012; Harvard Business Review, 2011) and so it is imperative to gain a more comprehensive understanding of such an important online market.

Some researcher have also suggested that cultural differences can have different effects on how online consumers perceive the importance of the

various factors that could influence them (Chau et al., 2002; Hall, 2000; Zhou, Dai and Zhang, 2007; Wee and Ramachandra, 2000). Hence, after careful consideration and to ensure the validity and credibility of the study, the data collected is limited to researching on the UK consumers' perspectives of online shopping.

Online consumer behaviour is a crucial topic for retailers to grasp in order to attract and deal effectively with consumers. The understanding of the factors that influence the online shoppers can help marketers to target their marketing activities and to develop appropriate strategies to convert potential consumers into actual buyers. The purpose of this study is to develop an understanding of the various influences that affect online shoppers' decisions to purchase in the United Kingdom.

Past research in the online shopping field is quickly becoming superseded due to the various technologies that change the Internet. For example, the surge of social networking and mobile Internet usage can have a big impact on Internet users and their shopping habits. Consequently, Internet users have become more sophisticated by keeping up-to-date with the new trends. According to the Office for National Statistics (2011), social networking is very popular with many Internet users making use of social networking and chat sites or using instant messaging or blogs. Unsurprisingly, the younger generation (16-24 year-olds) is especially prolific at keeping up with this new trend with 91% of the Internet users having taken part in social networking sites such as Facebook or Twitter; up from 75% in 2010. It has also been reported that social networking is more popular amongst women (60%) than men (50%). This activity is not limited only to the younger generation for 18% of the Internet users over 65 years old have also reported their participation.

Furthermore, mobile technologies are now more advanced and readily available to consumers at an affordable cost, making it even more convenient for

consumers to access the Internet with ease for shopping and browsing purposes. As reported by the Office for National Statistics (2011), 6 million more people accessed the Internet over their mobile phone for the first time which represents a significant growth in the adoption of mobile Internet technology compared to the same report conducted in 2010. Overall, the mobile phone was a popular method for Internet users to connect to the net, with 45% of those Internet users accessing the Internet via a mobile phone away from the home or workplace. Furthermore, 38% of Internet users have used mobile devices such as laptops, tablet PCs or other portable computers to connect to the Internet whilst out and about. This impressive rise in numbers can partly be attributed to the increase of wireless hotspots, with the number of Internet users connecting via this method almost doubling in the last twelve months to 4.9 million users.

It can be said that Internet users are now able to access the Internet from practically anywhere in the UK without being restricted to being at home or in the office. Needless to say, these technological improvements may greatly influence online shoppers. Past research in online shopping is quickly become outdated. As technology continues to improve and new trends start to form, it is important to develop a better understanding of the current online shopping population. Some previous models of online consumer behaviour in the past differ in research emphasis and do not present empirical evidence. This study will incorporate theoretical findings from previous literature and supported with qualitative and quantitative data analyses, and aims to develop a more comprehensive model which integrates the factors that can affect the online shoppers' purchasing decision.

#### **1.4 AIMS, RESEARCH QUESTIONS AND OBJECTIVES**

The aim of the study is to develop an integrated model to represent the holistic view of the online consumers in the United Kingdom. Through presenting an integrated model involving the use of both primary data from qualitative and quantitative methods, this study will respond to a host of relevant issues that influence online consumer purchasing behaviour including: consumer characteristics, consumer perception, product/service characteristics and merchant characteristics.

The aim is further developed into research questions to form the basis for this research. Research questions help to clarify the research, define the limits, and identify the empirical issues. The main research question for this study is: "What is important to consumers when shopping online?". In order to narrow the aspects that surround online shopping, there are two partial research questions formulated for this study.

RQ1: What is a model that can represent the views of the online consumers?

In order to satisfy RQ1, the research objectives pursued in order to answer the research questions are:

RO1: To critically review the factors which influence an online shopper's decision to purchase.

RO2: To develop a model based on the literature and data collected in the study.

RQ2: What are the most important aspects and prominent relationships that affect the online shoppers?

Associated objectives are:

RO3: To categorise these factors.

RO4: To examine the relationships between these factors.

RO5: To analyse the factors that have the most influence on online shoppers.

RO6: To analyse if there are differences between different types of online shoppers.

The first two research questions (RQ1 and RQ2) will be examined by using both qualitative and quantitative techniques. Figure 1.2 outlines the data collection technique and how it relates to the research questions for this study.

Research Question	Data Collection Technique	Method
<b>RQ1</b> What is a suitable model of online consumer behaviour?	Semi-structured Interviews + Questionnaires	Qualitative + Quantitative
<b>RQ2</b> What are the most important aspects and most prominent relationships that affect the online shoppers?	Semi-structured Interviews + Questionnaires	Qualitative + Quantitative

Figure 1.2. Data Collection Technique

It is the aim of this study to develop a better understanding of online consumer behaviour which would ultimately lead to the development of an integrated model. The model would be based on the empirical findings from mixed method research strategies (semi-structured interviews and online survey) to offer a comprehensive view of the online consumer behaviour in the UK.

### **1.5 RESEARCH CONTRIBUTION**

This study intends to add value to existing research and knowledge in the ever-growing area of online shopping. In the past, other authors have presented integrated models of online consumer behaviour but they differ in emphasis. Furthermore, past research in this area is becoming outdated. As the Internet population grows exponentially, it is imperative to revise, update and develop a better understanding of online shoppers. The study will also make a contribution to industry by developing an integrated model that will be beneficial to all stakeholders including businesses and shoppers.

### **1.6 RESEARCH STRATEGY**

A mixed method research strategy will be employed for this research. Based on the suitability and popularity of qualitative and quantitative research methodology in the field of study, this research will focus on the same. Semi-structured interviews will be conducted followed by an online survey.

### **1.7 THESIS STRUCTURE**

This study will be organised into five chapters. Figure 1.3 provides an overview of the thesis structure.



Figure 1.3. Thesis Structure

Chapter 1 introduces the background and motivation for the study. The formulation of research questions is discussed along with the contribution and research strategy.

Chapter 2 provides a review of literature and explores the traditional shopping theories; online shopping theories; and a comprehensive review of influences that affect online shoppers. The theoretical findings is conceptualised into a conceptual framework presented at the end of the chapter.

Chapter 3 outlines the mixed methods (qualitative and quantitative) research strategy used to collect relevant data in this study. The justification of the selection of the research methods is also discussed. The exploratory phase (qualitative) of the mixed methods design is also presented in this chapter.



Chapter 4 presents the results from the data collected from the online survey (quantitative phase). The method of data analyses is discussed and the results are presented in tables, and figures. The analyses chosen are aimed to provide statistical evidence to facilitate the development of the online decision purchasing model. Lastly, the suggested model for online consumer behaviour is discussed and reviewed.

Chapter 5 focuses on the interpretation and discussion of the research findings addressing the research questions and objectives for this study. The chapter ends with a discussion of the study's contributions to knowledge and practice, limitations and future research is also discussed.

## **1.8 CHAPTER SUMMARY**

This chapter introduced the background to the thesis. It started by highlighting the importance and current happenings of online shopping and moved onto the discussion of research gaps and reasoning for this study. The research questions and the set of objectives were also discussed. Finally, the chapter concluded with a brief introduction to the thesis structure.

## **2 LITERATURE REVIEW**

### **2.1 CHAPTER OVERVIEW**

The growth and wide spread nature of online activities, in particular online shopping, present a significant marketing challenge for businesses and companies that have used other marketing channels in the past as they must now also focus on the online market. It has been suggested that if companies do not act quickly, other companies that are aggressively pursuing their online business will be the only ones benefiting from the rise in online shopping. The growth of Internet users provides a promising future for e-marketers. Moreover, to benefit from such opportunities, marketers need to further develop the understanding of consumer behaviour online and develop marketing strategies that will enable them to significantly increase their customer base. This chapter explores marketing from a consumer perspective; traditional shopping theories; online shopping theories; and a comprehensive review of influences that affect online shoppers.

### **2.2 E-COMMERCE**

Electronic commerce (e-commerce) is defined as the process of buying, selling, transferring or exchanging of products, services and/or information using electronic networks such as the Internet (Turban et al., 2002). Kotler and Keller (2006) offer a similar definition of e-commerce in that it consists of the buying and selling process supported by electronic means. Similarly, McGoldrick (2002) believes that it can be classified as e-commerce when the form of shopping is conducted using electronic communication technology during the offering, ordering, and/or making payment. Taking into consideration all the definitions of

e-commerce, the author will refer to e-commerce as shopping via the Internet medium.

Various authors (Kotler, 2003; McGoldrick, 2002; Turban, 2006) believe that e-commerce can generally be classified into three main categories as shown in Figure 2.1:

Main Categories of E-commerce	Example
Business-to-Consumer e-commerce (B2C)	Amazon
Business-to-Business e-commerce (B2B)	Dell
Consumer-to-Consumer e-commerce (C2C)	eBay

Figure 2.1. E-commerce Categories

Business-to-Consumer e-commerce (B2C) describes the e-commerce conducted by businesses to provide the consumers with products and/or services. A popular example is Amazon.

Business-to-Business e-commerce (B2B) describes the e-commerce conducted by businesses between 1) manufacturer and wholesaler or 2) wholesaler and retailer. Although there was a clear separation between B2B and B2C in the earlier days of e-commerce, this distinction is now less apparent with the advancement of e-commerce. For example, Dell sells its products and services to both businesses and individuals.

Consumer-to-Consumer e-commerce (C2C) describes the e-commerce conducted between two consumers. A popular example is eBay.

### **2.2.1 Online Retailing**

Online retailing, commonly referred to as e-retailing, describes the process of selling goods and/or services to consumers over computer networks; predominantly done on the Internet nowadays. E-retailing is classified under the B2C of e-commerce (Shaw et al., 2006). Levy and Weitz (2003) suggest online retailing as a format which retailers communicate with consumers to offer products and services for sale via the Internet.

### **2.2.2 Online Shopping**

Online shopping is also commonly referred to as Internet shopping. It describes the process of using the Internet to buy goods and/or services. It is often confused with electronic shopping where the difference lies in the fact that electronic shopping also includes other electronic mediums such as television shopping. As online shopping becomes part of many people's lives, more and more business is conducted over the Internet and it has now become very easy for anyone to put their own products to be sold online.

A popular website that is commonly recognised as the website that popularised online shopping is Amazon. Amazon began selling online in 1995 as an online bookstore, which started with only a few people packing and shipping boxes of books in a two-door garage (Webley, 2010). At the end of the 1990s, the burst of the Dotcom bubble saw the end of many online companies. Amazon persevered partly due to its steady business plan that projected modest profit compared to the rapid growth envisioned by others. Today, Amazon is the world's largest online retailer and has expanded its market by selling many items such as DVDs, music CDs and MP3 downloads, computer software, electronics, games and toys, apparel, furniture, and groceries. It has also established websites in Canada, China, France, Germany, Italy, Japan, United

Kingdom, and USA. Furthermore, Amazon also undertakes to sell to other parts of the world as well although the range of their merchandise to these countries is limited.

### **2.3 MARKETING – CONSUMER'S PERSPECTIVE**

Marketing is often summed up and defined simply as meeting needs profitably (Kotler and Keller, 2006). It deals with identifying and meeting human and social needs. For example, the founder of the most well-known online auction website, eBay, discovered there was a market for difficult-to-locate items and thus created the online auction to target this niche. This is an excellent example of understanding the market where they captured the opportunity to “turn a private or social need into a profitable business opportunity” (Kotler and Keller, 2006, p.6).

In order for a retailer to be successful in the marketplace, it is necessary for them to understand the consumers (Blackwell, Engel and Miniard, 2001). By researching the consumer behaviour, it can provide insights into different strategies for retailers. Consequently, it is beneficial to understand the various influences that affect the consumers' decisions and behaviour.

### 2.3.1 Understanding the Consumer



Figure 2.2. Understanding Consumers: the Key Questions (Source: Jobber, 1995)

The consumer is an individual who purchases products or services for personal consumption (Jobber, 1995). In order to understand the consumer better, the five key dimensions of consumer behaviour can be considered as shown in Figure 2.2. The five key questions are as follows:

1. Who is important in the buying decision?
2. How do they buy?
3. What are their choice criteria?
4. Where do they buy?
5. When do they buy?

While the five dimensions are important in understanding the consumers, another useful dimension to consider is: How much do they buy? (illustrated in Figure 2.2.)

## **2.4 TRADITIONAL SHOPPING THEORIES**

The traditional models that acted as a catalyst for understanding online consumer behaviour are discussed in this section to enhance the understanding of the development of the recent online consumer behaviour models.

### **2.4.1 Buying Decision Process Model**

The buying decision process model is a traditional model to analyse the buyer's decision process. It involves five steps that explain the stages that a consumer undertakes during the process of making a purchase. It aims to understand the way the consumer thinks before, during and after the purchase of a product and/or service. Learning the purchasing process of consumers helps marketers to devise strategies to assist the consumers through the buying process – potentially turning browsers into actual buyers.

There has been a range of similar decision process models - each with a slightly different interpretation. A commonly cited model by Kotler and Keller in 2006 is shown in Figure 2.3.



Figure 2.3. Buying Decision Process Model (Source: Kotler and Keller, 2006)

The buying decision process of the consumer passes through these stages in the order of problem recognition; information search; evaluation of alternatives; purchase decision; and post-purchase evaluation.

**Problem Recognition** is defined as the recognition by the consumer that a product or service may meet his/her needs.

**Information Search** is defined as the inclination of the consumer to search for more information which most likely originated from the problem recognition stage.

**Evaluation of Alternatives** is defined as the evaluation of products or services to identify the most ideal choice that could improve the situation.

**Purchase Decision** is defined as the purchase intention. The buyer may or may not end up buying due to various factors surrounding the actual purchase.



**Post-Purchase Evaluation** is the evaluation of how the consumer feels about the purchase made. The marketer's job does not end with the purchase. The consumer's satisfaction or dissatisfaction with the product or service could impact the potential re-purchase relationship with the brand or seller.

The model suggests five stages which the consumers may undertake when deciding to make a purchase. Some consumers may choose to skip certain stages while others may follow each stage and may even repeat some of the stages a few times prior to making the final decision. However, the final result may or may not lead to an actual purchase.

This buyer decision process model sums up the essence of consumer behaviour under most contexts. As the number of online shoppers continues to grow, their online decision making process will naturally be different from the traditional shopping context.

#### **2.4.2 Theory of Reasoned Action (TRA)**

The Theory of Reasoned Action (TRA) was developed by Martin Fishbein and Icek Ajzen in 1975 (Figure 2.4) as an evolution of the previous study of Information Integration Theory (IIT). IIT attempted to predict the attitudes element while TRA added the behaviour element to the model. The Theory of Reasoned Action consists of three components including attitude, subjective norm, and behavioural intention.

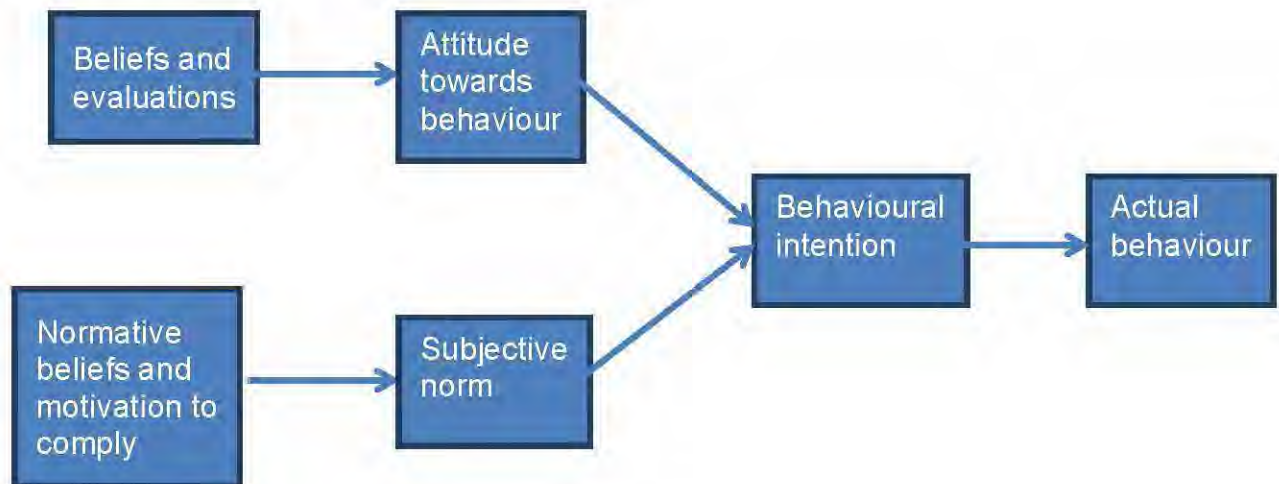


Figure 2.4. The Theory of Reasoned Action (TRA)

According to Fishbein and Ajzen (1975), the behaviour of a person is determined by their behaviour intention to perform such behaviour. It addresses the factors that limit the influence of attitude on the behaviour. For example, if the person would like to purchase a digital camera but does not have enough money to buy it, it can be said that the lack of funds will prevent his/her attitude from buying the digital camera. By considering the behaviour intention rather than only looking at the final actual behaviour, the factors that limit the influence of attitudes on behaviour can be explored.

TRA also suggests that the personal and social influence can determine the behaviour intention (Fishbein and Ajzen, 1975). The behaviour intention is formed by the person's attitude and subjective norms towards that behaviour. It is also argued that the attitude towards that behaviour is defined by the individual's positive or negative feelings towards performing the behaviour. The person will have a positive attitude towards behaviour if he/she believes the behaviour will lead to a positive result.

Social influence is reflected in the subjective norm, which is defined by the person's perception of whether people that are important to that individual think

whether the behaviour should or should not be performed (Fishbein and Ajzen, 1975). The opinions given by the people that are perceived to be important by the person are weighted by the motivation that the individual has to comply with the thoughts of those people. For example, if the person's attitude is leaning towards buying a digital camera online because it would save money, but his close friends think that it is unsafe to purchase a high-valued item online without being able to see the product first, the person would have to decide whether to follow what his/her attitudes suggest (buy the camera online) or what his/her close friends suggest (do not buy the camera online). Specifically, there are two components influencing the behaviour intention:

- 1) Attitudes - which consist of strength of belief and evaluation
- 2) Subjective Norm - which consists of normative beliefs and motivation to comply

However, it has been argued that there are conditions that affect the likelihood of people being able to act without limitations (Eagly and Chaiken, 1993; Sheppard, Hartwick and Warshaw, 1988). For example, the limitations can include ability, time, unconscious habits, and environmental limits. Sheppard, Hartwick and Warshaw (1988) argued that distinction between goal intention and behavioural intention is not always clear and there is often a separation between what one intends to do and what one is able to accomplish. Furthermore, Hale (2003) suggested the difference between attitude and subjective norm is not always clear.

In order to resolve some of the limitations, the Theory of Reasoned Action (TRA) was revised and extended by Ajzen (1985) and resulted in the Theory of Planned Behaviour (TPB). The extension added a component called perceived behavioural control to address the limitations.

### 2.4.3 Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (Ajzen, 1985) is an extension of the Theory of Reasoned Action (Figure 2.5). It introduced perceived behavioural control as an additional factor to the TRA model. According to Ajzen (1985), the need for this new component resulted from limitations on behaviours of which the individual has little control. It aims to take into consideration the person who has the intention of performing the behaviour but the actual behaviour is unsuccessful due to the lack of control or confidence of the behaviour. For example, if two people have strong intentions of learning a new language, the person who thinks he/she will succeed is more likely to persevere than the other who has a lack of confidence (Ajzen, 1991).

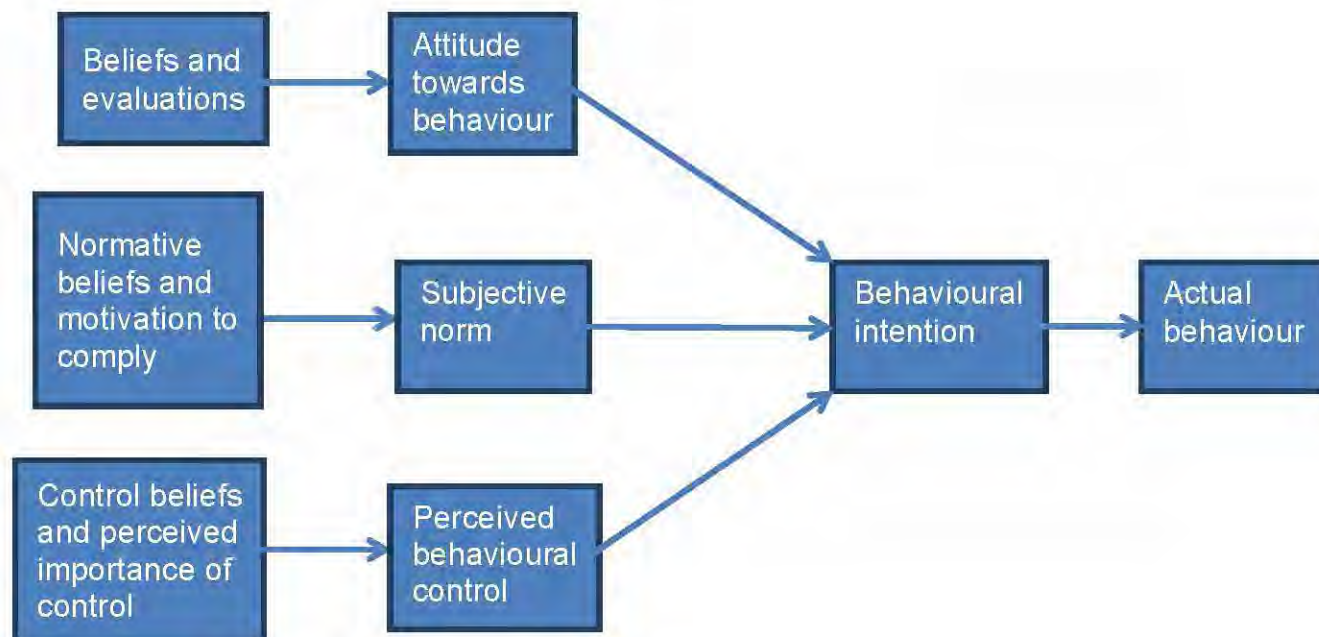


Figure 2.5. The Theory of Planned Behaviour (TPB)

Perceived behavioural control refers to the person's perception of the degree of difficulty in order to perform the behaviour (Ajzen, 1985). The individual can reflect whether the behaviour is feasible to achieve by considering the required amount of skills, effort, resources, opportunities, etc. It is also important to note

that what the person believes as the behavioural control may not necessarily be the actual behavioural control because various external influences may cause difficulty in assessing the actual control, and thus it is called perceived behavioural control.

The Theory of Planned Behaviour (TPB) has been applied to studies involving beliefs, attitudes, behaviours, and intentions in various fields (Miller, 2005).

#### 2.4.4 The Technology Acceptance Model (TAM)

Another notable theory is the Technology Acceptance Model (TAM) developed by Davis in 1989 (Figure 2.6). It was adapted from the TRA model to predict how the users accept and use technology. While TRA and TPB aimed to explain consumer behaviour, TAM aimed to address determinants for usage and acceptance of technology to better explain user behaviour (Davis, 1989).

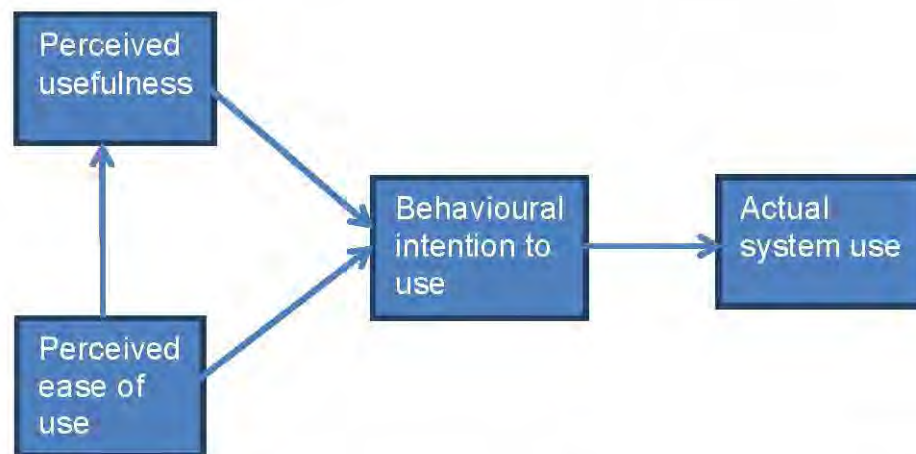


Figure 2.6. The Technology Acceptance Model (TAM)

While TRA has attitude measures, TAM has two technology acceptance measures – ease of use and perceived usefulness. Ease of use is defined as the degree to which a person believes using a particular system would be free of effort. Perceived usefulness is defined as the degree to which a person believes using a particular system would enhance his/her performance. Davis (1989) suggests that when users are presented with a new technology, perceived usefulness and perceived ease of use would influence their usage of the system. Perceived usefulness is also influenced by the perceived ease of use. Furthermore, the model suggests that the user's actual system use is determined by the behavioural intention to use it.

The Internet is vastly different from the traditional marketplace so it is impractical to adopt the traditional consumer behaviour theories to represent the same for the online channel. Furthermore, there is also a need to examine additional components that can potentially affect the online shoppers, such as online shopping components and demographics factors. In order to develop a better understanding of the online shoppers, there is a need to develop a model which integrates the various factors that affect the shoppers' decision to purchase online. This will, in turn, assist online retailers in developing appropriate marketing strategies.

## **2.5 ONLINE SHOPPING**

The desire for business efficiency, service improvement, and market presence has long encouraged businesses to offer alternative channels for conducting business. As for consumers, choices; ease of use; cost of shopping; and value for money have always been the overriding factors. Online shopping can provide both buyers and sellers with the above benefits. Considering the current economic climate, it is particularly significant.



Retailers are also facing rising costs of traditional selling and are forced to search for ways to capitalise on the new opportunities provided by the Internet. It is necessary for retailers to sustain growth in the competitive retail market via multiple channels (Venkatesan, Kumar and Ravishankar, 2007).

In the early days of electronic commerce, traditional UK brick-and-mortar retailers were reluctant to accept Internet technologies (Marciniak and Bruce, 2004). They primarily feared that by selling online, it would affect their own sales (Enders and Jelassi, 2000). However, as Internet technologies evolved the apparent rise of online shopping convinced the traditional retailers that targeting online shoppers was a wise choice.

## **2.6 ONLINE SHOPPING THEORIES**

Studies have been conducted on the e-commerce consumers' behaviour based on the Theory of Reasoned Action and the Theory of Planned Behaviour theories, including: Jarvenpaa, Tractinsky and Vitale, 2000; Koufaris and Hampton-Sosa, 2002; Kim and Park, 2005; Park and Kim, 2003; Pavlou, 2003; Shim et al., 2001. The authors analysed how the online shoppers' intention to purchase is influenced by their attitudes towards the online purchase.

The Technology Acceptance Model has continually been studied with the newly emerging factors that have occurred as Internet technologies improve. Some studies that have been conducted on the e-commerce consumers' behaviour based on the TAM theory include: Cheng, Lam and Yeung, 2006; Fenech, 1998; Legris, Ingham and Collette, 2003; Gefen and Straub, 2000; Gefen, Karahanna and Straub, 2003; King and He, 2006; Saad and Bahli, 2005; Koufaris and Hampton-Sosa, 2002; Schepers and Wetzels, 2007; and Pavlou, 2003.

The following sections explore further examples of models related to online shopping.

### 2.6.1 Online Pre-purchase Intentions Model

The Online Pre-purchase Intentions Model, as shown in Figure 2.7, is an example of the application of TRA and TPB models as discussed earlier in this section. Shim et al. (2001) proposed the Online Pre-purchase Intentions Model to contribute to the understanding of online consumer behaviour. This model is based on the traditional theories of the Theory of Reasoned Action and the Theory of Planned Behaviour.

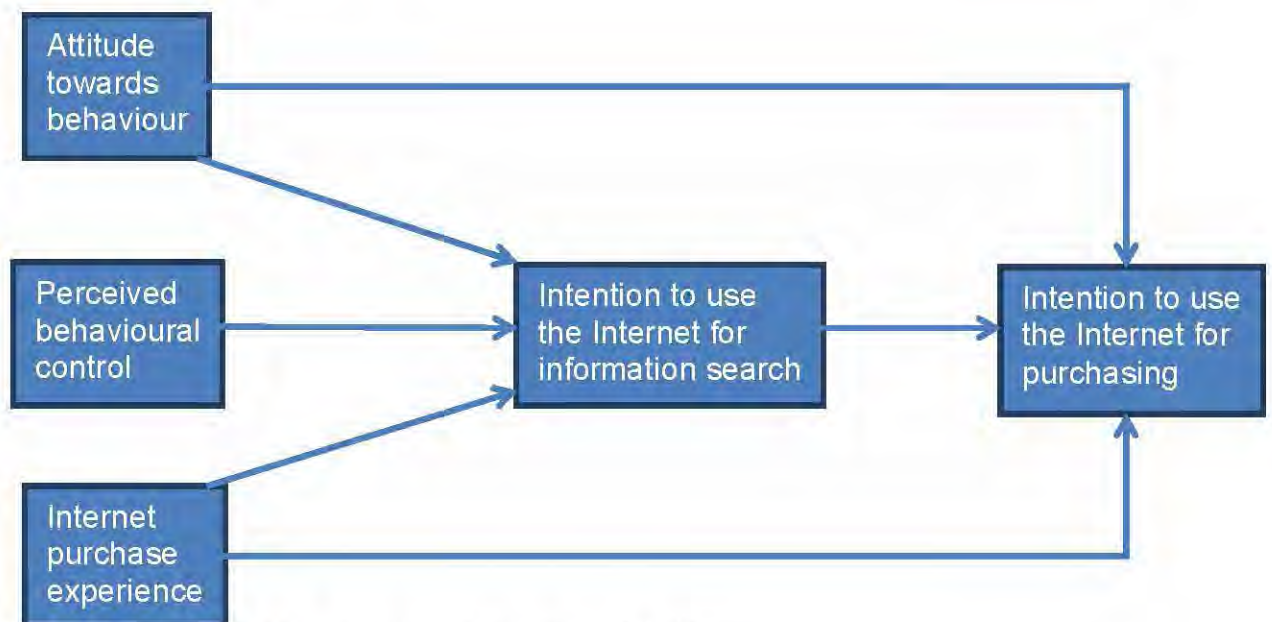


Figure 2.7. Online Pre-purchase Intentions Model

Shim et al. (2001) found a strong relationship for information search and the online consumers' purchasing behaviour. They found that the intention of online



information search has a positive impact on the online purchase intention. Other authors share a similar view and believe that the Internet has lower transaction costs for information search compared to the traditional shopping channels which, in turn, would entice consumers to search for information online and increase their intention to purchase (Levy and Weitz, 2001; Liang and Huang, 1998; Shim et al., 2001). Shim et al. (2001) believe that the online consumers' attitude and prior purchase experience also affect their intention to search information online. This is due to the consumers' level of perceived risks, associated with online information search, and purchases may decrease as they gain more purchase experience. Shim et al. (2001) further argue that previous Internet experience, perceived behavioural control and attitude towards online shopping all influence the consumers' intention to purchase on the Internet. Additionally, they believe that by providing a safe online shopping environment and offering good product return policies and guarantees, it would increase the likelihood of shoppers purchasing more online.

Shim et al.'s (2001) Online Pre-purchase Intentions Model addressed a few of the important aspects of online shopping behaviour but it is not sufficient to describe the full picture of online shopping. The areas that were notably missing in their research include items such as demographic characteristics and online shopping determinants and motivation.

### **2.6.2 Model of E-consumers' Relational Purchasing Behaviour**

The Model of E-consumers' Relational Purchasing Behaviour (Figure 2.8) is another example of the application of TRA and TPB models. Park and Kim (2003) developed this model to understand the purchasing behaviour of online consumers. The attributes of the online stores are included in the model and their influence on information satisfaction and relational benefit are examined.

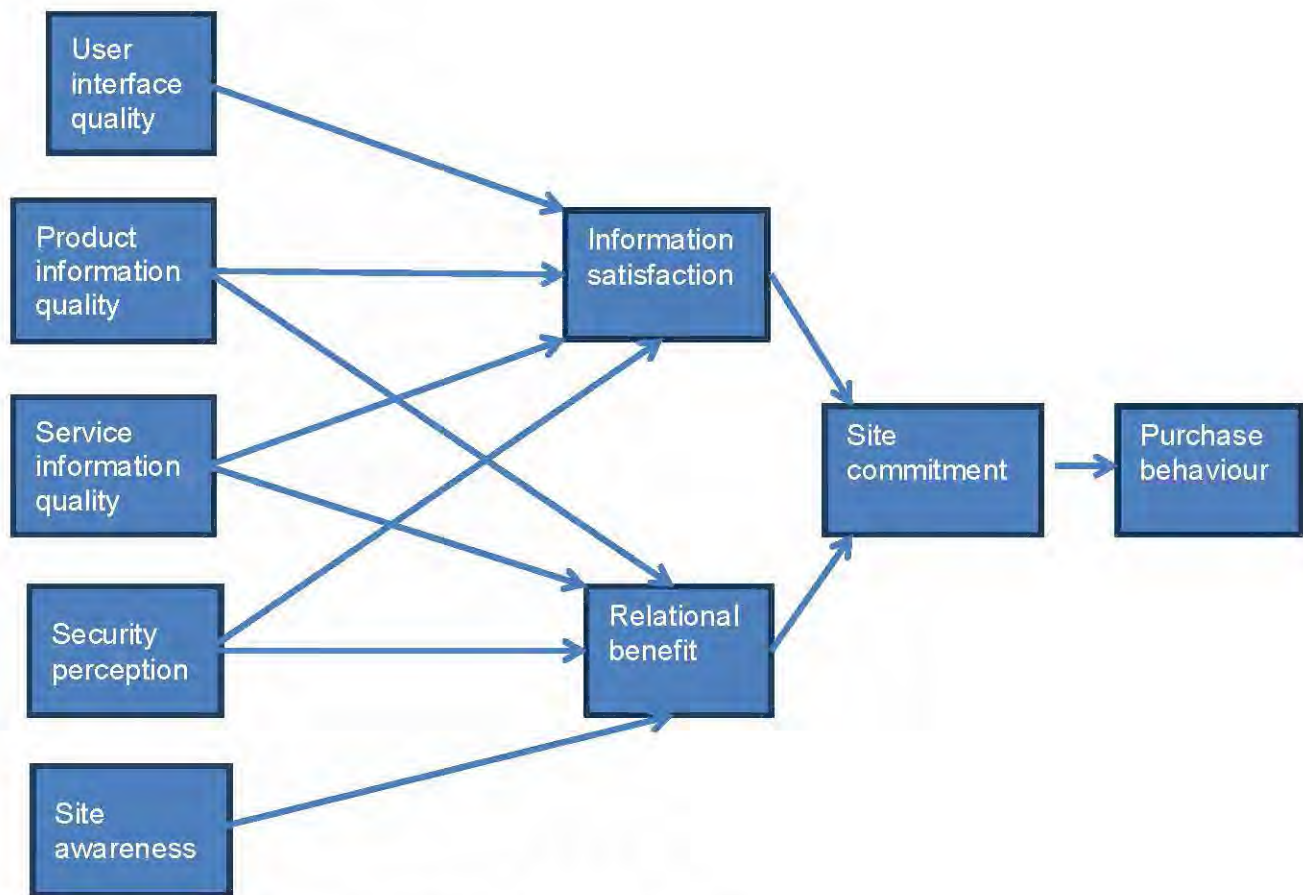


Figure 2.8. Relational Purchasing Behaviour Model

Park and Kim (2003) argued that the consumers' perception of an online store has a positive influence on information satisfaction and relational benefit. The perception attributes of the online stores include: user interface quality; product and service information quality; and security perception. They suggest that information satisfaction and relational benefit have a significant effect on the consumers' commitment to the site which in turn influences their online purchasing behaviour.

Similar to Shim et al.'s (2001) model, Park and Kim's (2003) Relational Purchasing Behaviour Model addressed a few significant factors that affect the online shoppers. Park and Kim (2003) addressed a further two extra factors in

their research. However, due to the complexity of the online consumer behaviour research, more factors (such as price, social, convenience, and demographic characteristics) should be incorporated into the study in order to address the various factors that affect the online shoppers.

The traditional consumer behaviour theories are not suitable to explain consumer behaviour in the online context, since there is a big difference between traditional shopping and online shopping channels. Furthermore, although traditional consumer behaviour theories and some of the online consumer behaviour models can be useful to gain a basic understanding of the consumers, they are far from being comprehensive. Therefore, it is not feasible to adopt any as the comprehensive online consumer behaviour model.

Consumer behaviour is a complex area and with Internet and technologies constantly improving, the testing of integrated online consumer behaviour empirically is a difficult task. But by drawing upon the strengths and addressing the weaknesses of the traditional consumer behaviour theories and other recent online shopping models, a better understanding of the consumers can be achieved. And through exploring and analysing further studies of research in the online shopping context, additional components can be integrated into the development of a comprehensive model of online consumer behaviour.

## **2.7 CATEGORISING THE FACTORS AFFECTING ONLINE SHOPPERS**

Previous research offers useful information on various aspects of consumer online shopping behaviour that focuses on recognising the factors that affect the willingness of consumers to purchase online. The findings from the literature are organised into four domain areas: consumer characteristics; consumer perception; product/service characteristics; and merchant characteristics. Consumer characteristics refers to the consumer's personal demographical,

internet usage and purchase characteristics. Consumer perception refers to the consumer's attitude and motivations towards online shopping. Product/service characteristics refers to the amount of knowledge that the consumer have of the product/service. Lastly, merchant characteristics refers to the features and service quality offered by the online store and its reputation. The proposed domain areas are intended to incorporate all the relevant areas in the topic under investigation. Figure 2.9 summarises the domain areas and the key elements used to explain the customer behaviour on the Internet and the relevant sources. Furthermore, Figure 2.10 provides an overview of the supporting literatures listed in chronological order that support each of the key elements.

	Domain Area	Key Elements	Sub Elements	Findings	Supporting Literature
1	<b>Consumer Characteristics</b>	Demographics	Gender Age Marital Status Income Education	Mixed Results (Positive; Negative; No Influence)	Bhatnagar, Misra, and Rao 2000 Brown, Pope and Voges 2003 Chau et al. 2002 Dholakia and Uusitalo 2002 Donthu and Garcia 1999 Dunckley and Jheita 2004 Hall 2000 Joines, Scherer and Scheufele 2003 Li, Kuo, and Russell 1999 Mahmood, Bagchi and Ford 2004 Morden 1999 Park 2002 Rodgers and Harris 2003 Rohm and Swaminathan 2004 Stafford, Turan and Raisinghani 2004 Susskind 2004 Swaminathan, Lepkowska-White and Rao 1999 Wee and Ramachandra 2000 Zhou, Dai and Zhang 2007
		Internet Experience	Internet Usage Experience Prior Purchase Experience	Positive Influence	Cho, 2004 Dillon and Reif, 2004 Doolin et al, 2005 Ha and Perks, 2005 Kuhlmeier and Knight, 2005 Laroche et al, 2005 Lee and Tan, 2003 Mourali, Laroche and Pons, 2005 Nysveen and Pedersen, 2004 Park and Stoel, 2005 Pavlou, 2003 Shim et al, 2001 Venkatesh and Agarwal, 2006 Wright and Dennis, 2007 Xu and Paulins, 2005



<b>2</b>	<b>Consumer Perception</b>	<b>Perceived Risks</b>	<b>Product Risk</b>	<b>Negative Influence</b>	Baker, 2000 Bhatnagar and Ghosh, 2004 Bhatnagar, Misra and Rao, 2000 Childers et al, 2001 Forsythe and Shi, 2003 Huang and Oppewal, 2006 Jarvenpaa and Todd, 1997 Liebermann and Stashevsky, 2009 Sarkar, 2011 Tan, 1999
			<b>Security Risk</b>	<b>Negative Influence</b>	Bhatnagar, Misra and Rao, 2000 Dillon and Reif, 2004 Doolin et al, 2005 Elliot and Fowell, 2000 George, 2002 Jarvenpaa and Todd, 1997 Liebermann and Stashevsky, 2009 Miyazaki and Fernandez, 2001 Ranganathan and Ganapathy, 2002 Sarkar, 2011 Szymanski and Hise, 2000 Warrington, Abgrab and Caldwell 2000
			<b>Privacy Risk</b>	<b>Negative Influence</b>	Bhatnagar, Misra and Rao, 2000 Business Week, 2000 George, 2004 Hoffman, Novak and Peralta, 1999 Jarvenpaa and Todd, 1997 Liebermann and Stashevsky, 2009 Lim, 2003 Ranganathan and Ganapathy, 2002 Vijaysarathy, 2002
		<b>Convenience</b>	<b>Convenience</b>	<b>Positive Influence</b>	Bhatnagar, Misra and Rao, 2000 Childers et al, 2001 Delafronz et al (2009) Delafronz, Paim, and Khatibi 2010 Dholakia and Uusitalo, 2002 Doolin et al, 2005

				Huang and Oppewal, 2006 Kim, Cho and Rao, 2000 Lee and Tan, 2003 Li, Kuo and Russell, 1999 Sarkar, 2011 Swaminathan, Lepkowska-White and Rao, 1999 Wolfenbarger and Gilly, 2001
	Ease of Use	Ease of Use	Positive Influence	Davis 1989 Gefen and Straub 2000 Gefen and Straub 2004 Hong, Thong and Tam 2006 Hsieh and Liao 2011
	Information Search	Information Search	Positive Influence	Choi and Park, 2006 Jayawardhena et al 2007 Kim and Park, 2005 Kim and Stoel, 2005 Wolfenbarger and Gilly, 2001
	Social Influences	Recommendations Reviews	Positive Influence	Chevalier and Mayzlin, 2006 Foucault and Scheufele, 2002 Ganesh et al, 2010 Garbarino and Strabilevitz, 2004 Limayem, Khalifa and Frini, 2000 Quinton and Harridge, 2010 Randall, Ulrich and Reibstein, 1998 Szmigin, Canning and Rappel, 2005 Vachon, 2011
	Hedonic Motivation	Enjoyment	Positive Influence	Carpenter and Moor, 2008 Childers et al, 2001 Dennis et al, 2007 Hansen, 2005 Jayawardhena and Wright, 2008 Kim and Forsythe, 2007 Koufaris, 2002 Moon and Kim, 2001 Park, Kim and Forney, 2006 Sorce, Perotti and Widrick, 2005

					Wolfenbarger and Gilly, 2001
3	Product/Service Characteristics	Product Price	Product Pricing	Positive Influence	Devaraj, Fan and Kohli 2002 Delafrroz et al (2009) Delafrroz, Paim, and Khatibi 2010 Brynjolfsson and Smith 2000 Dillon and Reif 2004 Brown, Pope, and Voges 2003 Jayawardhena, Wright, and Dennis 2007 Jarvenpaa and Todd 1996
		Product Information	Product Information	Positive Influence	Bakos, 1997 Cao, Zhang and Seydel, 2005 Doolin et al. 2005 Kuo, Hwang and Wang, 2004 Park and Kim, 2003 Peterson, Balasubramanian and Bronnenberg, 1997 Ranganathan and Ganapathy 2002 Zhang, Keeling and Pavur, 2000
4	Merchant Characteristics	Website Design	Design of Website Usefulness Shop Interface	Positive Influence	Dillon and Reif 2004 Gefen and Straub 2000 Gefen, Karahanna and Straub 2003 Griffith 2001 Hoque and Loshse 1999 Kim and Moon 1998 Jayawardhena and Wright, 2008 Lohse and Spiller 1998 Park and Kim 2003 Swaminathan, Lepkowska-White and Rao 1999 Van der Heijden, Verhagen and Creemers 2003 Venkatesh and Agarwal 2006 Wilson-Jeanselme 2001
		Reputation	Reputation	Positive Influence	deRuyter, Wetzels and Kleijnen 2001 Gefen and Straub 2000 Hyde and Gosschalk 2005 Jarvenpaa, Tractinsky and Vitale 2000



					Jun and Jaafar 2011 Pavlou, 2003
		Customer Service	Service Quality Communication Responsiveness	Positive Influence	Jarvenpaa and Todd 1997 Lennon and Harris 2002 Lohse and Spiller 1998 Park and Kim 2003 Prasad and Aryasri 2009 Shen et al 2006 Wolfenbarger and Gilly 2001

Figure 2.9. Summary of Factors Influencing Online Shoppers

[illegible]

2000 Kim, Cho and Rao													
2000 Limayem, Khalifa and Frini													
2000 Szymanski and Hise													
2000 Warrington, Abgrab and Caldwell													
2000 Wee and Ramachandra													
2000 Zhang, Keeling and Pavur													
2001 Childers et al													
2001 deRuyter, Wetzels and Kleijnen													
2001 Griffith													
2001 Miyazaki and Fernandez,													
2001 Moon and Kim													
2001 Shim et al,													
2001 Wilson-Jeanselme													
2001 Wolfenbarger and Gilly													
2002 Chau et al.													
2002 Devaraj, Fan and Kohli													
2002 Dholakia and Uusitalo													
2002 Foucault and Scheufele													
2002 George													
2002 Koufaris													
2002 Lennon and Harris													
2002 Park													
2002 Ranganathan and Ganapathy													
2002 Vijaysarathy,													

2003 Brown, Pope and Voges													
2003 Forsythe and Shi													
2003 Gefen, Karahanna and Straub													
2003 Joines, Scherer and Scheufele													
2003 Lee and Tan,													
2003 Lim													
2003 Park and Kim													
2003 Pavlou													
2003 Rodgers and Harris													
2003 Van der Heijden, Verhagen and Creemers													
2004 Bhatnagar and Ghosh													
2004 Cho													
2004 Dillon and Reif													
2004 Dunckley and Jheita													
2004 Garbarino and Strabilevitz													
2004 Gefen and Straub													
2004 George													
2004 Kuo, Hwang and Wang													
2004 Mahmood, Bagchi and Ford													
2004 Nysveen and Pedersen													
2004 Rohm and Swaminathan													
2004 Stafford, Turan and Raisinghani													
2004 Susskind													

2005 Cao, Zhang and Seydel													
2005 Doolin et al													
2005 Ha and Perks													
2005 Hansen													
2005 Hyde and Gosschalk													
2005 Kim and Park													
2005 Kim and Stoel													
2005 Kuhlmeier and Knight													
2005 Laroche et al													
2005 Mourali, Laroche and Pons													
2005 Park and Stoel													
2005 Sorce, Perotti and Widrick													
2005 Szmigin, Canning and Rappel													
2005 Xu and Paulins													
2006 Chevalier and Mayzlin													
2006 Choi and Park													
2006 Hong, Thong and Tam													
2006 Huang and Oppewal													
2006 Park, Kim and Forney													
2006 Shen et al													
2006 Venkatesh and Agarwal													
2007 Dennis et al													
2007 Jayawardhena, Wright, and Dennis													

2007 Kim and Forsythe													
2007 Wright and Dennis													
2007 Zhou, Dai and Zhang													
2008 Carpenter and Moor													
2008 Jayawardhena and Wright													
2009 Delafrooz et al.													
2009 Liebermann and Stashevsky													
2009 Prasad and Aryasri													
2010 Delafrooz, Paim, and Khatibi													
2010 Ganesh et al													
2010 Quinton and Harridge													
2011 Hsieh and Liao													
2011 Jun and Jaafar													
2011 Sarkar													
2011 Vachon													

Figure 2.10. List of Publications in Chronological Order

### **2.7.1 Consumer Characteristics**

Consumer characteristics have a strong influence on the buyer's intention to purchase on the Internet. The key elements include demographics and Internet experience.

#### *2.7.1.1 Demographics*

Demographics is a factor that has been researched frequently in the past. There have been different studies of various elements of demographic elements affecting online customer behaviour, including Bhatnagar, Misra, and Rao (2000) who studied age and gender of online consumers and found mixed results in these characteristics.

Until the late 1990s, the Internet was used primarily by the younger population who had less purchasing power than older adults, and hence early research did not find a significant age difference in online shoppers (Li, Kuo, and Russell, 1999). The age gap of online shoppers has since been narrowed, but it remains unclear to what extent age affects the consumers' likelihood to purchase online. Various authors such as Dholakia and Uusitalo (2002) and Stafford, Turan and Raisinghani (2004) discovered that younger consumers found more benefits to shopping online than older consumers, while Donthu and Garcia (1999) and Joines, Scherer and Scheufele (2003) suggested that older Internet consumers were more likely to buy online than their younger counterparts even though younger users had more positive attitudes towards online shopping. On the other hand, Li, Kuo, and Russell (1999) and Rohm and Swaminathan (2004) argued that no relationship exists between the age and the consumers' intention to purchase on the Internet. The discrepancy in past research findings may be due to the different criteria in defining the age in different studies

Authors such as Brown, Pope and Voges (2003), Donthu and Garcia (1999), Li, Kuo, and Russell (1999) and Rodgers and Harris (2003) have indicated that men make more purchases and spend more money online than women. Men are more likely to shop online because of the convenience while women tend to value their social interaction from shopping (Swaminathan, Lepkowska-White and Rao, 1999). According to the study by Rodgers and Harris (2003), women are more sceptical of e-business compared to men; they find that it is less satisfying to shop online and thus make fewer purchases on the Internet. But recent marketing statistics have also indicated that the number of females shopping online has increased and that females have become influential consumers of goods and services on the Internet (Bhatnagar, Misra, and Rao, 2000).

Studies by Donthu and Garcia (1999) and Susskind (2004) have reported that the tendency of consumers to purchase online is influenced by their income. Usually consumers that have higher incomes will be more willing to spend and in effect take on the risks of purchasing on the Internet. And because the items offered online may not be a necessity in people's lives, those with very low incomes are less likely to purchase online and take on the risks associated with online shopping.

Prior research has found mixed results between the educational level and the decision to purchase online. Donthu and Garcia (1999) and Mahmood, Bagchi and Ford (2004) found no relationship between the consumers' education level and their decision to purchase online. They further reasoned that it is due to the fact that online shopping is a relatively easy task and does not require a high level of education to perform. On the other hand, Li, Kuo and Russell (1999) and Susskind (2004) reported opposite findings where the education level positively influenced the decision to purchase online.



Another element of demographics is culture. Hall (2000) had an approach where he made a distinction between cultures by classifying them into high-context and low-context. He defined context as how individuals and their society seek information and knowledge. For countries like China and Japan, which he classifies as high-context cultures, people would try to be informed by collecting facts associated with the decision by obtaining the information from personal information networks. This is in line with the research by Zhou, Dai and Zhang (2007) where it was reported that people of Eastern cultures are in a tighter bond and use the Internet for social communication and hobbies (Wee and Ramachandra, 2000). On the other hand, those in low-context cultures, such as US and Canada, would tend to collect information associated with the decision from research gathered from the use of reports, databases and the Internet (Morden, 1999). Similarly, Zhou, Dai and Zhang (2007) suggested that the ties between individuals in the West are loose, and people tend to use the Internet for e-commerce and information searching (Chau et al., 2002). The above cultural difference could lead to a different shopping orientation, in that Eastern consumers value the entertainment aspects of online shopping while the studies of Park (2002) and Joines, Scherer and Scheufele (2003) revealed that convenience and variety seeking are important for Western consumers. Furthermore, it has been argued that different cultures have a different perspective of a pleasant computer interface which would influence the consumers' likelihood to purchase from an online site (Dunckley and Jheita, 2004).

There have been many studies of demographics and its effect on consumers' online behaviour. Many authors have suggested different arguments for and against this element. As the growth of the Internet population continues and becomes more diverse, demographics may have a diminishing effect on consumers' behaviour in recent years.

### *2.7.1.2 Internet Experience*

Previous studies on human behaviour suggest that the more a person is exposed to doing something, the more positive his/her attitude becomes towards it. Similarly, people are more proficient when they become more comfortable with the technologies, such as when they use new gadgets and become familiar with them. This tendency can be extended further into the consumers' usage of the Internet. It is argued that the more experience the user has with the Internet, the more experienced they become towards online shopping, which would then lead to a more positive attitude towards making a purchase online (Dillon and Reif, 2004; Doolin et al., 2005; Kuhlmeier and Knight, 2005; Xu and Paulins, 2005). On the other hand Cho (2004) and Nysveen and Pedersen (2004) did not find the relationship to be significant.

Venkatesh and Agarwal (2006) suggested that with greater experience, the customer can perform product-related tasks more effectively since they have prior knowledge to draw upon. Studies by Murali, Laroche and Pons (2005) and Park and Stoel (2005) found that when consumers are more familiar with an object, they will be more confident in their ability to make the right decision. If consumers are experienced with familiar websites then this would allow them to develop search and navigational strategies which would be of benefit to them, in that they would become more efficient and therefore this would have a positive effect on them. Since Internet purchasing may still be new to some consumers, online purchases are still perceived as being riskier than purchasing from retail stores (Laroche et al., 2005), so online shoppers would rely on their prior purchasing experiences. Needless to say, these can only be found by completing online purchases.

According to Jayawardhena, Wright and Dennis (2007), the time spent online after the first online shopping has a positive relationship with the frequency of online purchase. The accumulation of experiences in purchasing online would

increase the familiarity and knowledge of online shopping (Ha and Perks, 2005). Online users who have strong purchase intentions usually have had previous Internet purchasing experience that assists in decreasing their uncertainties. Numerous studies have found that increased shopping experience would reduce the perceived risk (Lee and Tan, 2003; Murali, Laroche and Pons, 2005; Park and Stoel, 2005; Pavlou, 2003) and enhance perceived benefits, and thus, induce satisfaction (Doolin et al., 2005).

Research also suggests that prior online shopping experiences that result in satisfactory outcomes would assist in leading the consumers to continue to shop on the Internet in the future (Shim et al., 2001). This is consistent with previous finding that past experiences decrease the consumers' perceived risk levels associated with shopping online. On the other hand, if the prior purchase experience was not pleasant, consumers would be more reluctant to buy again on the Internet in the future.

As the Internet becomes increasingly essential for our daily life and the Internet population grows larger, studies have indicated that Internet shopping would have a positive influence on consumers as they have more interaction with the Internet. One can assume that in time, this element of online behaviour would become less significant.

### **2.7.2 Consumer Perception**

Consumer perception has been found to be an important predictor that influences the consumers' intention to purchase online. Perceived risks, convenience, information search, social influences, and hedonic motivation are key elements that are included in this category.

#### *2.7.2.1 Perceived Risks*

Perceived risks are the uncertainties of the purchase environment which consumers may consider in relation to the possible consequences associated with making an unsuitable decision and their purchasing outcome (Hunter et al., 2004). When the consumers' risk perception increases when buying from a website, they are less motivated to buy from that particular vendor and/or elsewhere online (Spake and Finney, 2010). Authors such as Liebermann and Stashevsky (2002) and Pavlou (2003) have suggested that perceived risk includes: web retailers misrepresenting products; leaking private information; and providing misleading advertising. Previous studies have identified that consumers' risk perception is a primary deterrent for growth in the online shopping domain (Culnan and Armstrong, 1999; Liu and Wei, 2003; Tan, 1999). Research has also shown that the perceived risks negatively influence the consumer's willingness to shop for products and services (Bhatnagar et al. 2000; Jarvenpaa et al. 1999; Liao and Cheung 2001; Park et al. 2004; Pavlou 2003). In a study conducted by Liebermann and Stashevsky (2009), the researchers further found that experienced Internet users that recognised the benefits of online shopping did not see risks as threatening. On the other hand, Jarvenpaa and Todd (1997) has commented that risk perception plays a minor role in shoppers adopting online shopping. In general, product risk, security risk and privacy risk are regarded as the main areas related to consumers' perceived risks (Forsythe et al., 2006; Shergill and Chen, 2005).

#### *2.7.2.2 Product Risk*

Product risk is the risk of making a poor or inappropriate buying decision. It includes risks such as making a poor economic decision from failing to compare prices; inability to return a product; or not receiving a purchased product (

Bhatnagar and Ghosh, 2004; Bhatnagar, Misra and Rao, 2000; Jarvenpaa and Todd, 1997; (Sarkar, 2011)). Forsythe and Shi (2003) found that product risk was the most commonly reported reason for consumers' reluctance to purchase online. Product risk also includes the performance of the product which takes into account the failure of products to meet the expectations. This is related to the inability to examine the product prior to purchase and the concerns of receiving defected goods (Baker, 2000; Childers et al., 2001; Tan, 1999). Consumers may prefer to be able to examine the quality of the products before purchase but that cannot be achieved whilst shopping online so there is also the risk of purchasing an item which will not be fit for purpose (Bhatnagar and Ghosh, 2004, Jarvenpaa and Todd, 1997). However, new development in technologies has allowed websites to showcase their products and services with more product information to combat this problem.

In addition, Internet shopping involves a delivery having to be made, whereby the consumers run the risk of not receiving the product on time (Huang and Oppewal, 2006; Sarkar, 2011). Consumers who may need to make use of the purchased items for a time-restricting objective may also be more aware of the negative consequences of purchasing items that do not satisfy their needs. As the Internet population becomes more familiar with comparing websites and reading reviews before purchasing, the likelihood of buying a product that does not satisfy their need actually decreases. Furthermore, the advantage of purchasing from a retail store is that it allows the shopper to gain immediate fulfilment of the purchase.

#### *2.7.2.3 Security Risk*

The security of online transactions features prominently in discussions about online shopping (Szymanski and Hise, 2000). Consumers are concerned with

security of their payment, and reliability and privacy policy of online store (Gefen and Straub, 2000). Bhatnagar, Misra, and Rao (2000) defined financial risk as fears for the security of consumers' financial information online. A customer feels especially vulnerable when buying from a vendor for the first time especially if they are not well known (Sarkar, 2011).

A common concern of consumers is the safety of their financial data. For example, sending credit card information over the Internet is risky due to the possibility of credit card fraud (Doolin et al., 2005; George, 2002; Jarvenpaa and Todd, 1997; Sarkar, 2011). This is a major setback for consumers in that the risk does not only affect that particular transaction, but the risk can potentially affect the security in related and future transactions. Many online stores offer a personal information privacy protection policy and guarantee for transaction security, and provide details on how transaction and personal data are secured (Elliot and Fowell, 2000). Additionally, many credit card companies offer a payment protection guarantee against product fraud or if the consumers receive products that are not as described. In a study by Ranganathan and Ganapathy (2002), they found that security was a top concern and affected whether consumers had a high or low intention to purchase. However, Dillon and Reif (2004) found that those who have made a purchase online in the past were less concerned with consumer risk issues. Unauthorised access to personal and credit card information were found to directly affect the amount of online purchases (Miyazaki and Fernandez, 2001). Websites could increase consumers' online trust by taking steps to lower the perceived environmental risks or by raising its security (Warrington, Abgrab and Caldwell, 2000).

While most websites utilise a wide range of security measures to protect their consumers, the Internet users often prefer to check the legitimacy of a store before purchasing. Banks and financial institutions are also introducing new technologies to decrease the risk concerns of consumers.

#### *2.7.2.4 Privacy Risk*

Consumers are concerned with their privacy. Privacy risk reflects the degree to which consumers may sacrifice their privacy in order to provide personal information in making an Internet purchase (Bhatnagar, Misra and Rao, 2000; Jarvenpaa and Todd, 1997; Vijaysarathy, 2002). Once the consumers enter their personal details, they have no control on how the information will be used and who will be able to see their sensitive details. Although the privacy policies can often be found stated in fine print on the website, it is often difficult for the consumers to spend time to read and keep track of the policy changes (BBC News, 2012). According to George (2004), privacy concerns are often reported to be one of the key reasons for consumers who prefer not to shop online. Referring to the Graphic, Visualisation, and Usability Centre's (GVU) 1997 Internet surveys, 53% of the online users are cautious of personal data being collected from commercial websites while 66% do not register with websites, fearing that their personal information may be misused. Similarly, a survey conducted by Business Week in 2000 indicated that 94% of Internet users, who had never bought on the Internet before, were concerned that companies may use their information to send them unwanted information or that they may pass their information on to other marketing companies.

Consumers may put their privacy at risk when they make a purchase online and need to provide confidential information during the transaction. Ranganathan and Ganapathy (2002) found that the privacy concerns of the site can have a negative influence on the consumers' intention to purchase. Unauthorised acquisition of personal information or the use of personal information collected by companies for third parties are the main concerns of consumers (Lim, 2003). Hoffman, Novak and Peralta (1999) found that a large number of Internet consumers do not trust their Internet service providers enough to enter personal information in order to purchase items on various online stores. They also

suggested that when the privacy concerns increase, the likelihood of purchasing online decreases.

Due to reported incidents of the misuse of consumer personal information by individual and company employees, security and privacy still remain a major concern for online shopping consumers. This has encouraged many software houses to develop a wide range of security applications to safeguard consumers' information.

#### *2.7.2.5 Convenience*

Many past research have stated that consumers tend to be convenience-oriented (Delafronz et al., 2009; Donthu and Garcia, 1999; Swaminathan, Lepkowska-White and Rao, 1999) and that convenience is one of the key factors influencing online consumer behaviour (Wolfenbarger and Gilly, 2001). In line with the definition used by Huang and Oppewal (2006), convenience is defined as the reduction of the opportunity costs of effort and time involved in shopping activities.

Many online consumers are attracted to online shopping because it is available anytime and anywhere. This is in contrast with traditional shopping where the buyers would need to plan for and travel to multiple shopping destinations for purchases; search for parking spaces; and wait in queues (Childers et al., 2001). The time and effort saved from having to visit brick-and-mortar stores is a welcoming change for the buyers and hence more buyers are starting to shop online rather than at a physical store (Dholakia and Uusitalo, 2002). According to Wolfenbarger and Gilly (2001), convenience is the principal benefit of online shopping.



Sarkar (2011) suggests online stores should offer convenience since it significantly influences the consumers' decision to purchase and it's their primary motivation to shopping online. Lee and Tan (2003) found that purchasing and convenience was positively associated with online consumers' satisfaction which in turn would improve the chances of purchases. Kim, Cho and Rao (2000) found that consumers with a time-constrained lifestyle were positively influenced by the online buying behaviour. UK retailers such as Tesco Plc are targeting these convenience-oriented consumers by offering other products/services such as home purchases and broadband services on top of the regular grocery deliveries (Wright et al, 2006). Unnecessary shopping time and inability to locate in-stock products of the desired colour and size are examples of occurrences that diminish the shopping experience (Bhatnagar, Misra and Rao, 2000). Furthermore, other studies also confirm that consumers who valued convenience tended to purchase online more often (Delafröoz, Paim, and Khatibi, 2010; Doolin et al., 2005; Li, Kuo and Russell, 1999; Swaminathan, Lepkowska-White and Rao, 1999).

There are also some drawbacks to purchasing online. The consumer must have access to the Internet in order to shop online, but with the rise in mobile connectivity each year, this issue is becoming less significant. There is also a matter of the waiting time for the item to arrive and depending on the circumstances, the necessity to make arrangements to receive or collect the order. However, the benefits of shopping online generally far outweigh the drawbacks, especially for individuals who have time constraints (Huang and Oppewal, 2006).

#### *2.7.2.6 Ease of Use*

Ease of use refers to the belief that the consumers have regarding the extent to which the system would require minimal effort to use (Davis, 1989). This is described as ease of use and it is normally considered when involving the utilisation of information technology. Past research has found perceived ease of use to influence the online purchase intentions of the consumers.

Internet shopping could involve the use of various technologies such as computers, tablet PC, or mobile phones. As such, there being existing obstacles of online shopping, online stores should beware not to make their websites too complicated to use, for it may discourage some of the potential online shoppers from purchasing from that store. Past research has identified that ease of use would lead to increase in the perception of usefulness (Davis, 1989; Hong, Thong and Tam, 2006; Hsieh and Liao, 2011) and have an influence the online purchase intention of consumers (Gefen and Straub, 2000; Gefen and Straub, 2004). There are now many price comparison websites available on the Internet that can allow online consumers to compare prices between online stores quickly and easily. Furthermore, websites could consider product comparisons as a function of their website to make it easier for the consumers to use. All of which, can help make online purchasing easier for the customers and in effect increase their intention to purchase more online.

#### *2.7.2.7 Information Search*

The advancement of Internet technology has influenced the thought process of consumers prior to purchasing an item. The Internet has become an important research tool for savvy consumers to obtain information regarding various products and services. Kim and Park (2005) have suggested that those who

search information related to products are likely to make a purchase. Kim and Stoel (2005) have emphasized the importance of being able to obtain information for online shopping. Similarly, Wolfinbarger and Gilly (2001) have suggested a positive influence between a consumer's online information search and their online shopping intention.

According to Choi and Park (2006), the ability for the consumer to compare information online offers them the opportunity to choose the lowest price. With such a wide selection of products and retailer to choose from, the price would likely be lower than traditional shops, forming the basis of why consumers choose to shop online (Jayawardhena et al., 2007). Hence, having access to pricing information is a significant element exerting influence on online shoppers as suggested by Kim and Stoel, 2005.

With numerous online retailers available to choose from and price-comparison websites easily accessible, online shoppers are often able to find the lowest prices quickly and effortlessly. However, retailers should not only concentrate on providing the lowest prices to the consumers, but they should also consider other important motivations that influence the online shoppers as well.

#### *2.7.2.8 Social Influences*

Social influences include relatives, friends and colleagues, articles, reviews, and the promotion of websites. Humans naturally try to conform in order to become a member of their communities by observing others within that society. Vachon (2011) suggested that people tend to mimic the buying behaviour of other individuals around them in an attempt to conform to what they perceive as the society's standard. It has been suggested that people monitor the purchases of others to obtain information so they can make a better-informed purchasing decision. If the item in question is one that has been purchased by another

individual of the same community, this may influence the purchase decision of the potential buyer. For example, those that would like to be considered included within a particular social group will more likely purchase products or brands that can be considered prestigious (Randall, Ulrich and Reibstein, 1998).

Social influences can be applied within the online platform. With so many online stores offering a range of items at attractive prices, it is difficult for online stores to distinguish themselves. Social networks are regarded as a new technology that can be used to encourage social influence (Ganesh et al., 2010). Products and services can now be shared over social networks through techniques such as recommendations, reviews, and viral marketing that could reach a large number of people, which would not have been possible without social networks. Many online retailers are now offering rewards to those that recommend their product on social networks. Recommendations can be spread via different online platforms such as forums, virtual communities, e-mail, and social networks. Hence, it has been suggested as a new method for online retailers to advertise without the high cost associated with traditional advertising. Social networks and virtual communities form strong relationships that can influence consumer behaviour (Quinton and Harridge-March, 2010). Additionally, Szmigin, Canning and Rappel (2005) suggested that modern social networks offer opportunities for retailers to develop potential relationships with their consumers.

Recommendations from media and family are an important antecedent of shopping intention on the Internet (Jayawardhena and Wright, 2008; Limayem, Khalifa and Frini, 2000). Their study found that while influence from media and family was significant, influence from friends had little effect on the intention to purchase. On the other hand, Chevalier and Mayzlin (2006) suggested that recommendations from other online users had an impact on consumer's purchase decision at online stores. Similarly, Nielsen (2009) reported that there has been an increased emphasis on peer to peer recommendations based on

trust within the online context. Similarly, it has been reported that consumers are affected by influential product reviewers or bloggers (eMarketer, 2008). Additionally, Garbarino and Strabilevitz (2004) found that women are more influenced by recommendations than males, while friends' influence was not found to be significant other than for online literary purchases (Foucault and Scheufele, 2002).

The Internet population now has many sources to use where research may be carried out prior to making a purchase online. Various recommendations and review websites are available for consumers to research a product or shop. There are also forums dedicated to online shopping where consumers can communicate with other shoppers to ask for opinions and suggestions. It is submitted that social influences will have an increasing effect on this topic and should merit more research.

#### *2.7.2.9 Hedonic Motivations*

While many of the influences are closely related to utilitarian motivations, hedonic motivations is quite different in comparison. Hedonic motivation refers to the enjoyment and entertainment aspects of forming the individual's attitude and behaviour toward online shopping (Kim and Forsythe, 2007; Moon and Kim, 2001). Wolfinbarger and Gilly (2001) argue that consumers that are more hedonically motivated are interested in attaining some fun through their purchases and shopping experiences. This type of shopper searches for entertainment while shopping including browsing the Internet for information, seeking for bargain opportunities, and having an interest related to a specific product or hobby. Interaction with social networks and exposure to viral marketing can also be considered fun and entertaining to hedonic shoppers. Thus, the purchasing of a product as an online shopping activity can be

regarded as a social performance similar to traditional shopping (Dennis et al., 2007).

Childers et al. (2001) and Hansen (2005) suggest that although utilitarian motivations are considered significant, hedonic motivations should be considered equally as well in determining online purchase intentions. According to Dennis et al. (2007), the enjoyment of shopping online is likely to increase the planned or unplanned purchase intention of the shopper (Koufaris, 2002). Childers et al. (2001) and Hansen (2005) mentioned that hedonic shoppers often visit online stores without a particular aim, thus retailers should try to target these hedonic consumers by providing enjoyable shopping processes since it is an attractive element likely to draw in these consumers.

Sorce, Perotti and Widrick (2005) noted that hedonic consumers prefer online stores that are attractive and easy to use. As suggested by Childers et al. (2001), hedonic shoppers prefer interactive media rather than text-orientated designs. An interactive website created to entertain the user should be taken into account. The website should be exciting, fun, and entertaining to satisfy the consumers' need and encourage them to purchase (Carpenter and Moor, 2008; Childers et al., 2001; Park, Kim and Forney, 2006).

With online shoppers gradually becoming more diverse and sophisticated, online stores are trying to cater to the individual's needs and deliver what the consumers want. Hedonic motivation did not gain as much attention in previous studies compared to utilitarian motivations but with the advancement of social networks in recent years, it would be beneficial for online stores to learn more about this topic.

### **2.7.3 Product/Service Characteristics**

Price and product information are two of the main elements cited in literature that are categorised under product characteristics. Researcher (Devaraj, Fan, Kohli, 2002; Jayawardhena, Wright, and Dennis, 2007) found that the different prices between online and offline channels were significant in terms of channel satisfaction (Donthu and Garcia, 1999).

#### ***2.7.3.1 Product Price***

Price is defined as the total monetary cost to the consumer for the purchase. Researchers such as Jarvenpaa and Todd (1996) and Liao and Cheung (2001) and have discovered that price has a significant impact on the consumers' decision to purchase online. Many Internet users are attracted to competitive prices that they find online. This is particularly important because different pricing strategies are applied to online goods and services. A product and service would cost more if purchased in a company's bricks-and-mortar store but the same can often be purchased at a lower cost online. Research conducted by Devaraj, Fan and Kohli (2002) showed that lower prices between online and offline channels plays an important role in a consumer's shopping decision. In the traditional market, Brynjolfsson and Smith (2000) noted that price is an important aspect for consumers making purchases. Dillon and Reif (2004) studied young consumers and found that they are heavily influenced by the price of the products. Delafrooz, Paim, and Khatibi (2010) suggests price as one of the factors that influence the online shoppers. Similarly, authors such as Brown, Pope, and Voges (2003), Jayawardhena, Wright, and Dennis (2007), and Jarvenpaa and Todd (1996) concluded that price sensitivity is the principal reason behind consumers buying on the Internet.

In recent years, many price comparison websites have surfaced on the Internet that allow consumers to compare prices on different products. Consumers now have many choices available to select from since price comparison websites allow them to find the cheapest price on a certain product within a few minutes. Price comparison facilities provide consumers with the assurance of receiving value for money. Therefore, integrating price comparison details should be an integral part of their website functionality.

#### *2.7.3.2 Product Information*

Product information is information provided by the online stores on the products being sold. Some of the product information may include: product attribute information; consumer recommendations; evaluation reports; etc. (Park and Kim, 2003). Online shoppers cannot physically touch or feel the actual products, so they make their decisions mainly based on information made available to them by the online business. It is argued of the necessity that online stores should give price-related information and product information to reduce consumers' search costs (Bakos, 1997; Bellman, Lohse and Johnson, 1999). Ranganathan and Ganapathy (2002) also found that uncertainty of the quality of the information could affect their perception of the reliability of the vendors which could influence the purchase intention of the consumers. By providing detailed information about products, consumers are better placed to decide on the purchases and this increases the consumer satisfaction (Peterson, Balasubramanian and Bronnenberg, 1997). Kolesar and Galbriath (2000) further suggested that providing tailored product information to meet different consumers' needs could be influential to the success of the online store. Therefore, the information presenting the products must be up-to-date in order to help consumers make their choices easily in a manner that they can understand (Park and Kim, 2003; Zhang, Keeling and Pavur, 2000). Useful and easily understood information positively influences purchase intention (Cao,



Zhang and Seydel, 2005; Kuo, Hwang and Wang, 2004). One method to improve consumers' satisfaction is if merchants provide product categories that enable easier accessibility to obtain the product information (Korgaonkar, Silverblatt and Girard, 2006). Furthermore, Park and Kim (2003) suggest that online shopping stores could offer the following: hyperlinks to the product's manufacturing website for extensive product information; a comparison of the product versus other similar stores; product testimonials; and product demonstrations. With the advance in technological developments, websites are now capable of showcasing the products in many innovative ways. For example, it is becoming more common for a clothing website to offer a 360-degree view of an item; a video showing a model wearing the item on the catwalk; or an opportunity for the user to create a virtual model of themselves so that the customer may see how they look wearing the item prior to purchase.

The above is indicative of a need for more transparency, and this could make a difference between gaining and losing a customer.

#### **2.7.4 Merchant Characteristics**

The merchant reputation, design of the website, and customer service facilities plays an important role in influencing the consumers to make purchases and thus, they are listed as three of the key elements under Merchant Characteristics.

#### *2.7.4.1 Reputation*

According to Hyde and Gosschalk (2005), the confident consumers have on the vendors are closely associated with the vendor's reputation. Reputation for online retailers is especially important because online shoppers are not able to physically touch or feel the item and hence they have risk involved when purchasing and can only rely on the product description. And so, the reputation of the online retailer plays an important role in influencing the online shopper's decision to purchase. It has been found that the reputation of the seller may positively influence the shopper's decision to buy (Jun and Jaafar, 2011). The familiarity of the online store can also increase the level of trust of the consumers and affect positively to their willingness to purchase (Gefen and Straub, 2000; Pavlou, 2003). deRuyter, Wetzels and Kleijnen (2001) found that companies with a better reputation have a significant impact in the consumers' trust of online stores. Similarly, a study by Jarvenpaa, Tractinsky and Vitale (2000) discovered that the reputation of the online store was the primary factor that can influence the trust. It is often regarded by the consumers that retailers with good reputation as one that can provide a positive purchase experience. In contrary, a retailer with bad reputation is unlikely to convince the customer to purchase from them.

With the available of numerous feedback and rating systems found online, a consumer with bad experience are able to post their experience online easily. Therefore, retailers work hard to keep up their reputation since it is a significant element that can influence the online shoppers.

#### *2.7.4.2 Website Design*

Website design plays an important role in influencing the online consumers' decision to purchase. According to Prasad and Aryasri (2009), online stores

have evolved over the years to satisfy the increasing needs of the consumers. It has been found that an attractive and pleasing website can enhance the online shoppers' engagement in the shopping activity (Kim, Fiore and Lee, 2007; Van der Heijden, Verhagen and Creemers, 2003). Similarly, Novak et al. (2000) determined that a website with pleasing attributes can lead to the shoppers' desire to stay longer since it affects their cognitive and emotional states. Conversely, Wilson-Jeanselme (2001) reported that a poor Internet shop interface and ineffective management of content can deprive the buyer of the convenience of online shopping. Thus, it is necessary to consider the effects of designing the website with consideration to its layout and navigational features (Lohse and Spiller, 1998).

For Internet shopping, the dominant components are ease of use and usefulness of the website (Davis, Bagozzi, and Warshaw, 1989; Dillon and Reif, 2004) which includes the ease of placing, tracking and cancelling orders; listing payment options; and the returns policy. The ease of use could be described in terms of the time needed to locate and purchase products and the convenience of using the checkout process (Swaminathan, Lepkowska-White and Rao, 1999). Gefen, Karahanna and Straub (2003) argued that the perceived usefulness of the site can affect the purchase intention of repeat consumers but it does not have the same influence on potential consumers. However, Gefen and Straub's (2000) previous study proposed that perceived usefulness did have an influence on the purchase intention of consumers. Similarly, Koufaris (2002) found that perceived usefulness increase the consumers' likelihood to shop online. They also found that perceived usability had an effect on the perceived usefulness but did not have an effect on the purchase intention of the consumers.

Usually, when potential consumers visit a website, they stay for a very brief period of time before moving on to another destination. They may browse through the website and explore the capabilities or visit the website to make a

purchase (Venkatesh and Agarwal, 2006). A well designed user interface can help reduce the consumers' cost of searching and the time required for information processing and thus has a positive influence on the experience of the consumers interacting with a retailer's product (Griffith 2001). The above minimises the effort needed for consumers to perform a choice and make the purchasing decision quicker and easier (Hoque and Loshse, 1999). As Internet providers become more competitive, consumers are paying less for monthly Internet bills and thus, the consumers' search cost is becoming more and more irrelevant. However, as previously discussed in the 'Convenience' element, buying online may reduce the consumers' opportunity costs of time and effort when compared to traditional shopping which could turn out to be quite significant, especially for people with a time-restricted lifestyle.

When the website is fast and easy to use, online shopping is thought to be more pleasurable and satisfying for the consumers. If a website is organised and easy-to-navigate, it would increase the swiftness of the shopping time (Szymanski and Hise, 2000). The purchasing transaction is negatively influenced by poor online store design (Lohse and Spiller, 1998). Similarly, Park and Kim (2003) found that the user interface quality significantly relates to the consumers' site commitment and actual purchase behaviour. Likewise, in an Internet banking study conducted by Kim and Moon (1998), it was found that the visual design of the site can have a positive influence on trust. Additionally, the help functions providing user information to guide them through navigating the store; or using ordering features such as the shopping cart; and the product search engine could prove to be beneficial in helping consumers with the searching and purchasing process (Park and Kim, 2003). Liang and Lai (2002) concluded that consumers are more likely to shop at a well-designed online store and it would also be beneficial to have speedy checkout and payment system (Jayawardhena and Wright, 2008).

The design of a website is important in order to convert potential buyers into actual consumers. As Internet technologies improve web stores are required to improve their design, to become more user-friendly and provide more functions and interactivity for their consumers, in order to make the experience feel similar to that of physically being in a store. This may require the involvement and participation of various disciplines such as sociology as well as technology.

#### *2.7.4.3 Customer Service*

Online stores have to rely on excellent consumer service to distinguish themselves from the other online competitions (Lennon and Harris, 2002). Consumers want careful, continuous, and useful communication across geographic barriers (Lohse and Spiller, 1998). Consumers expect to communicate with the company and obtain the desired information in a timely manner. These elements are frequently used to determine the store choice behaviour in both online and offline stores (Jarvenpaa and Todd, 1997). Customer service includes answers to payment and return policies and frequently asked questions. Consumers are usually interested in help with product selection, gift services, sales representatives' contact details, and information about shipping costs (Park and Kim, 2003). Prasad and Aryasri, (2009) and Shen et al (2006) also found the importance of customer service and its impact on the consumers' willingness to purchase from an online store.

Vendor knowledge and responsiveness are how the online store anticipates and responds promptly and effectively to consumers' needs and requests in order to provide the consumers with the knowledge necessary to make the purchase (Jarvenpaa and Todd, 1997). By stating the methods of payment, expected delivery times and charges on the online store, consumers would be more comfortable knowing these beforehand. Wolfinbarger and Gilly (2001) found that consumers are willing to serve themselves as long as the information they need

is relatively easy to find. They also found that customer loyalty increased substantially when online buyers learned that customer service representatives were available online and were willing and able to resolve situations quickly. Conversely, online buyers who have had a poor experience with the website's consumer service avoid doing business with that website and move on to another one that may even be more expensive. Ultimately, if the consumers feel they can contact customer service easily to solve their questions/problems, they are more likely to decide to make a purchase.

The above is an attempt to incorporate, from previous literature, the notable factors that affect online shoppers. The findings are organised into consumer characteristics; consumer perception; product/service characteristics; and merchant characteristics which can be further illustrated in the framework (Figure 2.11), as shown in the following section.

## **2.8 CONCEPTUAL FRAMEWORK OF ONLINE CONSUMER BEHAVIOUR**

The constant technological advances developing around the Internet and the increasing sophistication of online shoppers have made the prediction of online consumer behaviour a challenging task. Through the review of literature, the preliminary factors that influence online consumer behaviour have become apparent. The following conceptual framework builds on the existing literature to model the online consumer behaviour.





Figure 2.11. Conceptual Framework of Online Consumer Behaviour

The key factors found in the existing literature form the basis of the development of the framework where the variables related to online shopping were integrated to provide a cohesive view of online consumer behaviour. The existing studies associated with online consumer behaviour can be separated and mapped into four key domains including: consumer characteristics, consumer perception, product/service characteristics, and merchant characteristics. A range of factors that influence the online customer behaviour are categorised accordingly into each of these areas. Consumer characteristics refers to the consumer's personal demographical, internet usage and purchase characteristics which includes elements such as demographics, Internet usage experience, and prior purchase experience. Consumer perception refers to the consumer's attitude and motivations towards online shopping and includes key elements of: product, security, and privacy risks; trust; convenience; information search,

recommendations, reviews, and hedonic motivations. Product/service characteristics refers to the amount of knowledge that the consumer have of the product/service and includes the product pricing and product specification elements. Lastly, merchant characteristics refers to the features and service quality offered by the online store and its reputation, it includes the elements of: the shop interface, service quality, communication, and responsiveness, and reputation. Various authors have recommended and discussed different factors that influence the online buyers' behaviour. The framework is based purely on existing literature and where an element is not apparent it is more likely that it is embedded within another element within the framework. For example, ease of use is categorised under the consumer perception element but it could also be included under the merchant characteristics element.

## **2.9 CHAPTER SUMMARY**

This chapter introduced the literature surrounding the online shopping context. It started with online shopping and its consumers and moved onto the traditional shopping theories; online shopping theories; and a review of the various influences that affect the online consumers. Finally, the chapter concluded with the conceptual framework built from existing literature where variables related to online shopping were integrated to conceptualise the online shopping behaviour.



## **3 RESEARCH DESIGN**

### **3.1 CHAPTER OVERVIEW**

This chapter outlines the research design used for this study. It uses a mixed method (qualitative and quantitative) research strategy to collect relevant data. The study intends to provide an integrated model to capture the various factors that influence the online shoppers and thus a multi-method strategy is chosen as the appropriate method. This study is influenced by the research design as suggested by Saunders, Lewis and Thornhill (2006) in Figure 3.1. The exploratory phase (qualitative) of the mixed methods design is presented in this chapter.

### **3.2 RESEARCH PHILOSOPHY ADOPTED IN THIS STUDY**

For some researchers, their purpose for doing research is to understand a position more clearly while others want to change things by virtue of their research – some want to do both. Nevertheless, all research has common objectives which are about asking questions, exploring the problems, and reflecting on what materialises to make meaning from the data (Clough and Nutbrown, 2002). This study will investigate the topic to enable the research to extend knowledge and explore theories that require further interpretation to reach a new conclusion.

Research philosophy is an important element of conducting research since it can significantly affect the way research is conducted. The understanding of research philosophy can help clarify research designs (Easterby-Smith, Thorpe and Lowe, 2002) and influences how the research is carried out (Saunders, Lewis and Thornhill, 2007). Therefore it is important to choose the appropriate

philosophy at the start of a research as it forms the grounds for the study. The selection of philosophy will also depend on the association between the philosophy and the research questions for the study.

The research onion, as suggested by Saunders, Lewis and Thornhill, is used to enhance the understanding of the research process for this study since each layer contains important elements that can influence the research process and the choices applied in this study are shown in Figure 3.1.

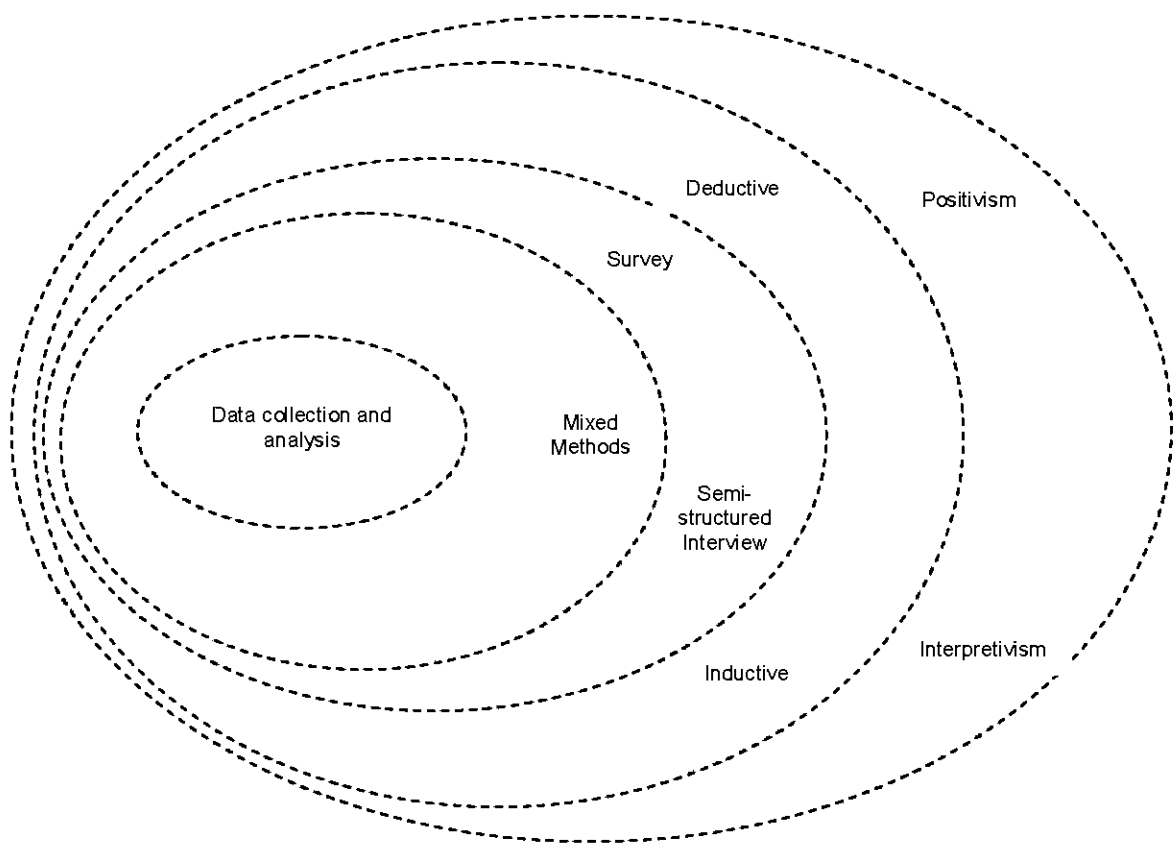


Figure 3.1. Research Process (Adapted from Saunders et al., 2006)

According to Malhotra and Birks (2007), the two main research philosophies that are widely used in social science research include positivism and interpretivism. Each contains key differences that would influence the researcher's view of the social, organisational and management of the research process. The adoption of suitable research philosophies can help to improve the researcher's

understanding of the ways he/she can approach a study in their particular field of study.

### **3.2.1 Positivism**

Positivism is one of the main philosophies in research and has been adopted by business researchers (Hussey and Hussey, 1997). A positivist is likely to prefer 'working with an observable social reality and that the end product of such research can be law-like generalisations similar to those produced by the physical and natural scientists' (Remenyi et al., 1998:32 cited in Saunders, Lewis and Thornhill, 2007:103). It supports the application of the methods of the natural sciences to the study of social reality and beyond (Bryman and Bell, 2007). The positivism position supports the existence of a unique reality which could be measured by objective methods (Easterby-Smith, Thorpe and Jackson, 2008) and considers this single reality as independent from human perception (Blaxter, Hughes and Tight, 2006). They further argue that the perceptions and intuitions of the researcher should not be used as grounds for measurements of the social world. To attain the reality, the researcher can make use of research tools such as surveys and experiments.

The positivist position believes that human behaviour could be generalised. Collis and Hussey (2003) further state that it is entirely possible to explore the human behaviour in a similar manner in social science research. Hence, it permits gathering large amounts of data and provides an explicit theoretical focus (Easterby-Smith, Thorpe and Lowe, 2002). Generally, causative relationships of the issue can be used as grounds to associate with theories. And as theory gathers numeric measures of observations and becomes more standardised, the studies can then be replicated, tested and verified with high levels of reliability. This would then help to eliminate subjective influences from the researchers (Denzin, 1989).

### **3.2.2 Interpretivism**

The interpretivism philosophy is based on the view that a strategy is required that respects the differences between people and the objects of the natural sciences (Bryman and Bell, 2007). Hence, the interpretivism position concentrates on the subjective meanings instead of the measurement of phenomena (Bryman and Bell, 2007; Collis and Hussey, 2003; Creswell, 2003). Interpretivism is necessary for the researcher to understand the differences between humans in their role as social actors. In addition, humans interpret the social roles of others in accordance with their own set of meanings. The importance of interpretivism is that the researcher has to adopt an empathetic stance and enter the social world of the research subjects and understand their world from their own point of view.

By contrast to positivism, interpretivism does not consider a single reality which is independent from human perception. The interpretivist perspective considers each individual experience as a different reality and that more than a single reality exists. And hence, it suggests that it is not possible to generalise since it would lead to the dissipation of the significance of the phenomenon as a whole. The interpretive perspective is usually associated with qualitative methods in that it enables the flexibility of inquiry rather than posing fixed questions (Denzin and Lincoln, 2000).

### **3.2.3 Philosophical Position Adopted in this Study**

According to Saunders, Lewis and Thornhill (2007), business and management research is usually comprised of a mixture of both positivism and interpretivism. The researcher has taken into consideration the different philosophical positions to decide that it would be beneficial for this study to adopt both the positivism and interpretivism philosophical positions. The idea is so that the shortcomings

associated with one philosophy can be compensated with the strength of another. The differences between positivist and interpretive research approaches and their theoretical assumptions that guided this study can be seen in Figure 3.2.

Theoretical Assumptions	Positivism	Interpretivism
Ontology	Person (researcher) and reality are separate.	Person (researcher) and reality are inseparable (life-world).
Epistemology	Objective reality exists beyond the human mind.	Knowledge of the world is intentionally constituted through a person's lived experience.
Research Object	Research object has inherent qualities that exist independently of the researcher.	Research object is interpreted in light of meaning structure of person's (researcher's) lived experience.
Methods of understanding	Identifying conditions or relationships which permit the collectivity to exist.	Interpretation of the subjective meanings which individuals place upon their action.
Types of data	Quantitative data	Qualitative data
Theory of Truth	Correspondence theory of truth: one-to-one mapping between research statements and reality.	Truth as intentional fulfilment: interpretations of research object match lived experience of object.
Validity	Certainty: data truly measures reality.	Defensible knowledge claims.
Reliability	Replicability: research results can be reproduced.	Interpretive awareness: researchers recognise and address implications of their subjectivity.

Figure 3.2. Differences between Positivism and Interpretivism (Adapted from J rgen Sandberg as cited in Weber, 2004)

The various approaches are commonly related to the different research philosophies. For example, the deductive approach is associated with the

positivist position while the inductive approach is associated with the interpretivism position (Easterby-Smith, Thorpe and Jackson, 2008). Similarly, the quantitative method is usually linked with positivism while the qualitative method is normally linked with interpretivism. Both philosophical positions and their approaches normally assume different ontology and epistemology.

### **3.3 PHILOSOPHICAL UNDERPINNINGS**

According to Easterby-Smith, Thorpe and Lowe (2002), all research paradigms consist of three elements which are ontology, epistemology, and methodology. Examining each of the elements together constitutes the philosophy of a paradigm.

#### **3.3.1 Ontology**

Ontology is the assumptions made about the nature of reality (Easterby-Smith, Thorpe and Lowe, 2002). It describes the view on the nature of being and existence (Blaikie, 1993; Crotty, 1998) and it is related to existence, the component of it, the interaction of the components, and the view of existence (Blaikie, 1993). Ontological assumptions are important in that they affect the way the researcher views the world – what he/she considers as real and how he/she attributes the existence to one set of things over another.

#### **3.3.2 Epistemology**

Epistemology is a set of assumptions about the most appropriate methods of inquiring into the nature of the world (Easterby-Smith, Thorpe and Lowe, 2002).

It is considered to be one of the major branches of philosophy which investigates the nature of knowledge. More specifically, epistemology attempts to answer the basic question of what distinguishes between true (adequate) knowledge and false (inadequate) knowledge (Easterby-Smith, Thorpe and Lowe, 2002). Huberman and Miles (2002) also note that positivism and interpretivism rely on different approaches to research due to their different assumptions on the nature of knowledge.

### **3.3.3 Methodology**

Methodology is techniques used to collect data on specific situations (Easterby-Smith, Thorpe and Lowe, 2002). The approaches and perspectives that are chosen in the research process are the methodology (Collis and Hussey, 2003). Determining an appropriate methodology is essential for a research (Collis and Hussey, 2003; Malhotra and Birks, 2007). It can facilitate in the understanding of the processes of scientific enquiry, and serve as a set of rules for reasoning to evaluate facts and ultimately draw conclusions (Denscombe, 2003). It is important to reflect back on the objectives of the research in order to make the choice for methodology. Studies with dissimilar perspectives would require different tools for data collection and analysis.

### **3.4 INDUCTIVE/DEDUCTIVE APPROACHES**

The two main research approaches are deductive and inductive. Positivism and interpretivism are associated with deductive and inductive approaches respectively. In general, the deductive approach is normally associated with a positivist position while the interpretivism position emphasises the inductive approach. The deductive approach is an enquiry into problems based on the



testing of a theory, and it moves from theory to empirical investigation (Yin, 1993). The inductive approach is the process of moving from specific observations to a more general theory (Lee and Lings, 2008).

The deductive approach involves the development of theory that is subjected to rigorous testing (Saunders, Lewis and Thornhill, 2003). It moves from the particular to the general, from a set of specific observations to the discovery of a pattern (Babbie, 2006).

On the other hand, theory would follow data in the inductive approach. Research using an inductive approach is concerned with the context in which such events were taking place. It involves a smaller sample of subjects which are more appropriate than using a large number, as usually found in the deductive approach.

Deduction	Induction
Moving from theory to data	Gaining an understanding of the meanings of humans attached to events
The need to explain causal relationships between variables	A close understanding of the research context
The collection of quantitative data	The collection of qualitative data
The application of controls to ensure validity of data	A more flexible structure to permit changes of research emphasis as the research progresses
Researcher independence of what is being researched	A realisation that the researcher is part of the research process
The necessity to select samples of sufficient size in order to generalise conclusions	Less concern with the need to generalise

Figure 3.3. Deductive and Inductive Research Approaches (Source: Saunders, Lewis and Thornhill, 2007)

Figure 3.3 highlights the major differences between deductive and inductive approaches. Creswell (2007) suggests that a topic with a wealth of literature



from which to define a theoretical framework and a hypothesis would more likely be using the deductive approach. On the other hand, if the research topic is relatively new, the inductive approach is more likely to be used to generate, analyse, and reflect the themes that the data are suggesting.

As suggested by Saunders, Lewis and Thornhill (2007), there are no rigid separations between deduction and induction and it would be beneficial to combine the approaches in the same study. Due to its nature, this research will be conducted using a combination of the approaches to acquire new knowledge, since a deductive research approach is more quantitative in nature while an inductive research approach is more related to qualitative.

### **3.5 RESEARCH METHODS**

The two main approaches commonly applied in social science for conducting research are qualitative and quantitative methods and these will be discussed below.

#### **3.5.1 Qualitative Method**

The qualitative method is typically associated with the interpretivist position and inductive approach since it is grounded on the assumption of subjective reality so the issue may affect the observed reality (Easterby-Smith, Thorpe and Jackson, 2008). The basis of qualitative methods focuses on human perceptions rather than countable measures (Hussey and Hussey, 1997). Qualitative research seeks to discover meaning and patterns and to understand the problem from multiple perspectives and its emphasis is on theory building (Maylor and Blackmon, 2005).

One of the main advantages of the qualitative method is that the researcher establishes direct contact with the participant and can apply an adaptable approach in data collection, and permit further inquiry to better understanding the issues that affect the online shoppers. Bryman (1988) and Denscombe (2003) believe that qualitative research is more adaptable than quantitative research in that qualitative research provides greater flexibility in gaining insights and can lead to a summary of unexpected results, which could then be examined further. Creswell (2007) suggested that qualitative research aims at the participant's thinking and can capture their most valuable responses.

However, a common disadvantage is that the findings cannot often be generalised (Krathwoh, 1997) and vary depending on the extraction and interpretation of the data (Malhotra and Birks, 2006).

### **3.5.2 Quantitative Method**

The quantitative method is typically associated with the positivist position and the deductive approach since it concentrates on the measurements of the issues in order to study them (Collis and Hussey, 2003; Easterby-Smith, Thorpe and Jackson, 2008). The basis of quantitative methods is grounded on countable questions such as 'How often?' and 'How many?' (Gummesson, 2000). Quantitative methods move from the particular to the general, from a set of specific observations to the discovery of a pattern (Babbie, 2006) and are subjected to rigorous testing (Saunders, Lewis and Thornhill, 2003).

The main focus of quantitative research is to collect numerical data to be analysed statistically (Malhotra, 2006; McDaniel and Gates, 2006). The data collected is then typically used to prove or disprove hypotheses (Bonoma, 1985;

Malhotra and Birks, 2007). Quantitative research allows the researcher to test the validity and reliability of the research using statistical methods (Easterby-Smith, Thorpe and Lowe, 2002).

However, a common disadvantage is that complex information which could be rich in details may be reduced to summative measures (Rubin and Rubin, 1995).

### **3.5.3 Mixed Methods - Triangulation of Approaches**

Benbasat, Goldstein and Mead (1987) explain that no single research method is considered better than another method. So in order to conduct a better piece of research for the study, using a combination of research methods (mixed methods) is an astute option.

Although quantitative methods can generally produce representative data, the disadvantage is that it is common to reduce complex information into summary measures. Details and the richness of the participant's behaviour are often neglected since they are difficult to quantify (Rubin and Rubin, 1995). On the other hand, qualitative research has richness and adds detail to data but the representativeness of the data may be questioned (Krathwoh, 1997) and there will, nevertheless, be tolerance of ambiguity and contradictions, which may lead to an alternative explanation (Denscombe, 2003).

It is important to examine the strengths and weaknesses of the mixed methods research (Figure 3.4) prior to making the decision of utilising this approach for a study.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Words, pictures, and narrative can be used to add meaning to numbers.</li> <li>• Numbers can be used to add precision to words, pictures, and narrative.</li> <li>• Can provide quantitative and qualitative research strengths.</li> <li>• Researcher can generate and test a grounded theory.</li> <li>• Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach.</li> <li>• The specific mixed research designs discussed in this article have specific strengths and weaknesses that should be considered (e.g., in a two-stage sequential design, the Stage 1 results can be used to develop and inform the purpose and design of the Stage 2 component).</li> <li>• A researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study.</li> <li>• Can provide stronger evidence for a conclusion through convergence and corroboration of findings.</li> <li>• Can add insights and understanding that might be missed when only a single method is used.</li> <li>• Can be used to increase the generalisability of the results.</li> <li>• Qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice.</li> </ul>	<ul style="list-style-type: none"> <li>• Can be difficult for a single researcher to carry out both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently; it may require a research team.</li> <li>• Researcher has to learn about multiple methods and approaches and understand how to mix them appropriately.</li> <li>• Methodological purists contend that one should always work within either a qualitative or a quantitative paradigm.</li> <li>• More expensive.</li> <li>• More time consuming.</li> <li>• Some of the details of mixed research remain to be worked out fully by research methodologists (e.g., problems of paradigm mixing, how to qualitatively analyse quantitative data, how to interpret conflicting results).</li> </ul>

Figure 3.4. Strengths and Weaknesses of Mixed Methods Research (Source: Johnson and Onwuegbuzie, 2004)

Brannen (2005) suggests that choosing only a single-method (qualitative or quantitative) research may deceive the researcher into believing that they have “found the right answer” when, in fact, they have not. Both methods have their own advantages and their share of disadvantages but combining both methods could “expand the scope and breadth” of the study (Miles and Huberman, 1994).

Malhotra (2006) argues that both methods should be used to complement each other in order to produce a sound marketing research. The mixed methods approach draws from the strengths of both qualitative and quantitative methods and will provide insights from different perspectives (Creswell, 2003; Gill and Johnson, 1991; Krathwoh, 1997; Malhotra and Birks, 2007; Onwuegbuzie and Leech, 2005). By using the mixed methods research, the researcher can gain a comprehensive understanding of the concept being tested or explored (Creswell, 2003; Johnson and Onwuegbuzie, 2004; Newman and Benz, 1998). Furthermore, an important benefit of using mixed methods in social science research is that the flaws of one method can be compensated with the strengths of another (Krathwoh, 1997).

It is common for the researcher to conduct the qualitative method research for theory building and conduct the quantitative research for theory testing. It should be noted that neither traditions are independent nor mutually exclusive (Newman and Benz, 1998) and most research exists somewhere in between (Bryman, 1988; Creswell, 2003).

Furthermore, Medey (1982) cited in Onwuegbuzie and Leech (2005) proposed that "Combining quantitative and qualitative research helps to develop a conceptual framework, to validate quantitative findings by referring to information extracted from the qualitative phase of the study, and to construct indices from qualitative data that can be used to analyse quantitative data".

Creswell (2003) summarises the procedures to conducting quantitative, qualitative, and mixed method research in Figure 3.5.



Quantitative Research Methods	Qualitative Research Methods	Mixed Methods Research Methods
Predetermined	Emerging methods	Both predetermined and emerging methods
Instrument based questions	Open ended questions	Both open and close ended questions
Performance data, attitude data, observational data, and census data	Interview data, observation data, document data and audio-visual data	Multiple forms of data drawing on all possibilities
Statistical analysis	Text and image analysis	Statistical and text analysis
Statistical interpretation	Themes and patterns interpretation	Across databases interpretation

Figure 3.5. Quantitative, Qualitative and Mixed Methods Procedures (Source: Creswell, 2003)

The combination of the quantitative and qualitative methods into a single research has been recommended by a number of authors such as Brannen, 2005; Bryman, 1988; Creswell, 2009; Easterby-Smith, Onwuegbuzie and Leech, 2005; Thorpe and and Lowe, 2002.

#### 3.5.4 Consumer Behaviour Research

Consumer behaviour is complex and it would be difficult to rely on a single research framework to capture the necessary knowledge within this domain. To conduct the research effectively, different methods and techniques would be needed. This would require the researcher to be knowledgeable in the different research strategies and techniques to be able to choose the most appropriate research design.

Several authors have also supported the research approach of starting with an exploratory phase when conducting research, including (Giddens, 1984; Krathwoh, 1997; Straub and Carlson, 1989, Wolfenbarger and Gilly, 2001). Straub and Carlson (1989) have further suggested the need for research to start

with an exploratory phase followed up by a confirmatory phase in Information System research. Furthermore, many authors as mentioned in the last section support the use of multiple research techniques to ensure that multiple perspectives and interpretations are taken into account.

Based on the discussion of the research assumptions and approaches, this study employs the combination of literature review (secondary data), the qualitative method (semi-structured interviews), and the quantitative method (online survey) which is a triangulation technique that would help reduce the risk of inappropriate certainty and enhance the overall validity of the research (Robson, 2003; Yin, 1993). By working qualitatively and quantitatively, the results from the qualitative stage can be linked to a statistically representative sample with the inclusion of quantitative data (Brannen, 2005; Onwuegbuzie and Leech, 2005).

### **3.6 RESEARCH DESIGN FOR THIS STUDY**

To determine the most appropriate research design, careful consideration is given to examine the approach that would yield the best potential for an answer to the research questions and its objectives. This is important in deciding an appropriate combination of complementary strengths and limiting the potential overlapping of weaknesses for the study (Johnson and Onwuegbuzie, 2004). This is illustrated in Figure 3.6 where research questions and objectives are related to various components of the research process.

Research Question	Research Philosophy	Research Methods	Research Approach	Data Collection Technique
RQ1				



What is a suitable model of online consumer behaviour?	Positivism + Interpretivism	Quantitative + Qualitative	Deductive + Inductive	Questionnaires + Semi-structured Interviews +
RO1: To critically review the factors that influence the online shoppers' decision to purchase.				
RO2: To develop a framework based on the literature and data collected in the study.				
<b>RQ 2</b> What are the most important aspects and most prominent relationships that affect the online shoppers?	Positivism + Interpretivism	Quantitative + Qualitative	Deductive + Inductive	Questionnaires + Semi-structured Interviews +
RO3: To categorise these factors.				
RO4: To examine the relationships between these factors.				
RO5: To analyse the factors that have the most influence on online shoppers.				
RO6: To analyse if there are differences between different types of online shoppers.				

Figure 3.6. Research Design Chosen for this study

A mixed methods study involves the collection of data and integration of quantitative and qualitative data within a single study. This, nevertheless, is still similar to traditional research methods in that the study includes but is not limited to: formulating a research problem and research objective; developing a research purpose, research question(s) and hypothesis; selecting a research design/method; collecting data; analysing data; interpreting/validating data; and communicating the findings (Onwuegbuzie and Leech, 2005). Additionally, a study that utilises mixed methods would also take into consideration the order in which the qualitative and quantitative data are collected (concurrently or



sequentially) and the integration of data at one or more stages in the process of research (Creswell et al., 2003).

### 3.6.1 Adoption of Sequential Exploratory Strategy as Research Design

This study employs the sequential exploratory strategy mixed method design. There are two phases of this approach where qualitative and quantitative data were collected, analysed, and interpreted sequentially. As suggested by Creswell (2003), qualitative data was first collected and analysed, followed by a second phase of quantitative data collection and analysis that was built on the results of the qualitative phase. The purpose of this sequence is to use the quantitative data results to assist in the interpretation of the qualitative findings.



Figure 3.7. Overall Research Design for this Study

Furthermore, the main advantage of this two-phase approach is that the qualitative findings can be expanded to a wider sample (Creswell, 2003). The findings of both phases were then examined in the final interpretation part of the whole research. Figure 3.7 illustrates the overall research design of this study.

### **3.6.2 Primary and Secondary Data**

There are two main types of data sources in social science research: primary and secondary data. Data that has been gathered from researchers to address specific research problem(s) is primary data (Malhotra, 2007). Generally, material that has been published in some form is secondary data since the data has been collected for the purpose of previous research (Kotler and Keller, 2006; Saunders, Lewis and Thornhill, 2007).

Secondary data is essential in that, upon analysis, it can provide valuable insights into the area being researched and can enable the development of a foundation to develop further ideas (Malhotra, 2007). However, the secondary data may not have been collected specifically for the study so it may not contain information that would respond to the research questions. The secondary data may be too generic or too specific for the previous research to be useful which makes exploration difficult (Malhotra, 2007). Furthermore, it takes time for material to be published and so the data can often be out of date and become less relevant. That would be a big concern for research surrounding the area of the Internet, since it is rapidly changing with the technological improvements and ever-changing trends which could have a big influence on the way consumers shop online.

Easterby-Smith, Thorpe and Lowe (2002) suggest that primary and secondary data can be used efficiently and effectively to complement each other. The secondary data can be combined and compared against primary data so it can be interpreted more appropriately. Hence, this study employs the use of both secondary data (literature review) and primary data (semi-structured interviews and online surveys).

### **3.7 LITERATURE REVIEW**

The study commenced with an extensive review of literature in which various factors and current issues that affect online shoppers' decision to purchase were identified. The main research ideas covered the relevant theories in the literature on factors that affect online shoppers, including consumer characteristics, consumer perception, product/service characteristics and merchant characteristics. This assisted in identifying the gaps in the literature to build a foundation to progress to phase 1 of the research (semi-structured interviews).

### **3.8 PHASE 1 – QUALITATIVE METHOD**

Following the literature review, an exploratory qualitative phase was conducted to grasp the consumers' views on Internet shopping. Clark, Michael and Wood (1998) and Gwinner, Gremier and Bitner (1998) suggested that exploratory research can add a new dimension and provide a deeper understanding of the issues under study.

#### **3.8.1 Content Analysis**

The technique that is used to analyse data collected through semi-structured interviews is textual analysis. According to Holsti (1969, p.14), it is a technique "for making inferences by objectively and systematically identifying specified characteristics of messages". This technique is suitable to be used in this phase in that it can be used to evaluate textual or audio contents (Bryman, 2001). Content analysis helps the researcher interpret and derive meanings to develop an understanding of what is being investigated (Miles and Huberman, 1994). It involves the process of breaking down, comparing, conceptualising, and categorising data (Strauss and Corbin, 1990).

### **3.8.2 The Use of Interviews**

Interviews are a method to acquire information from the participants by asking questions. Questions are generally open ended to capture the participants' responses. Easterby-Smith, Thorpe and Jackson (2008) suggest three ways of conducting face-to-face interviews - unstructured, semi-structured and structured interviews:

- Unstructured interviews: Used to obtain in-depth information associated with the research issue. Participants are permitted to express themselves by responding to the questions according to their own perceptions relating to the issue.
- Semi-structured interviews: A list of predetermined questions will be asked of the participants. The researcher may manipulate questions accordingly during the interview process and therefore different participants may be asked different questions.
- Structured interviews: The same predetermined list of questions is asked of the participants in each interview.

Semi-structured interviews were selected to carry out the exploratory phase in this study. The aim was to develop an understanding of the participants' thoughts, views, and experiences associated with online shopping. According to Flick (1998) and Neuman (2006), semi-structured interviews can help in exploratory research or in generating new ideas. By being able to have direct contact with the participants, this data collection technique allows the researcher to adapt his/her questions during the process of the interview so that more attention could be addressed to the significant issues according to the person.

The semi-structured interviews were given a starting structure in order to give interviewees a point from which to move forward and to allow the interview to open in a structured way, while leaving space for fuller commentary and more detail towards the end of each topic under discussion. The questions raised in the interviews were mainly open ended and designed to allow the interviewees to express in detail their thoughts and experience on online shopping. The questions were carefully thought out to explore the predetermined themes of the research. The interview process was semi-structured and thus there was flexibility allowing the interviewees to introduce additional opinion, feeling, explanation and clarification regarding the topic.

Seven relevant questions were developed and finalised to be asked of the participants during the semi-structured interviews (Appendix A). Each of the interviews attempted to explore a number of broad questions and was designed to elicit detailed information from the participants based on the categories from the conceptual framework of this study:

- consumer characteristics
- consumer perception
- product/service characteristics
- merchant characteristics

The duration of the interviews ranged between 20-45 minutes. They were mainly conducted face-to-face while some were conducted via telephone or Internet services such as Skype to communicate by voice, video, and instant messaging to suit the availability of the interviewees. Prior to each interview, the participants were reminded that the information they provided would be kept confidential and was for academic research purposes only. This helped to build rapport between the interviewee and the researcher. In addition to the seven questions designed for the interviews, further supplementary questions were asked if the researcher felt any clarification or explanations were needed. During the interview process, the researcher listened carefully and attentively to

the interviewees. Any responses were appropriately made to maintain neutrality towards the topic being discussed.

### **3.9 PHASE 2 – QUANTITATIVE METHOD**

Following the exploratory study (semi-structured interview), an online survey was conducted as the other data collection technique for this research. The advantage of the quantitative method is that it allows the data collected in the previous phase to be generalised to a large number of the population so it can better represent the views of the wider population.

The key issues that have emerged through literature review and semi-structured interviews provided a foundation of factors that influence online shoppers. These findings have contributed to a better understanding of the current issues and by collecting quantitative data and upon further evidence, the findings can then be extended to a wider population and ensure validity and reliability of this study.

#### **3.9.1 Online Survey**

The survey is an effective and widely-used technique for collecting data as it can be administered simultaneously to a large number of people (Saunders, Lewis and Thornhill, 2003). The aim of the survey is to measure and explain statistically the opinions, attitudes, and behaviour of the target population (Babbie, 2006; Robson, 2002; Saunders, Lewis and Thornhill, 2007).

For this study, it is intended to reach a large audience in the United Kingdom in order to gain a more accurate representation of the UK population. After careful

consideration, the online survey was chosen as the most appropriate technique in order to increase the number of potential respondents in the UK. This is the most effective way to gather data from the UK population without being limited to certain regions within the country. A larger United Kingdom population can be reached via an online survey without being limited to a geographical location. An online survey also has the potential to collect a large number of responses since it allows respondents to complete a survey at their leisure. They can access the survey at anytime and anywhere so it is convenient and easy for anyone to participate. An Internet survey also provides an anonymous environment where the respondents are free to express their truthful opinions without unwanted influences of interviewers administering the surveys.

Furthermore, conducting an online survey is in line with the context of this research which aims to gain a better understanding of online shoppers. Hence this tool is the best choice to reach the online consumers. Szymanski and Hise (2000) suggested that if the respondents are familiar with using the Internet, they are more likely to complete an online survey accurately.

### **3.9.2 Survey Design**

One of the most important aspects of designing the questionnaire is that the researcher should be confident that the questions being asked will be interpreted the same way by all the respondents. Likewise, the answers given by the respondents should be understood by the researcher in the way intended by the respondents (Robson, 2002; Saunders, Lewis and Thornhill, 2003).

The questions used in the questionnaire must be defined precisely prior to data collection to ensure their validity and reliability. As such, much of the attention was spent on planning precisely what data was to be collected and how this

would be analysed. The survey design followed the rules cited in the literature by authors including Dillman, Smyth and Christian, 2007; Dillon, Madden and Firtle, 1994; Robson, 2003; and Saunders, Lewis and Thornhill, 2006. A copy of the survey is included in Appendix B.

### **3.9.3 Research Constructs (Item Development)**

Careful consideration was placed on the questions to ensure that the data collected could respond to the research questions and meet the research objectives of the study. As such, the questions in the survey were formulated after the research questions had been developed as suggested by Dillman, Smyth and Christian (2007) and Dillon, Madden and Firtle (1994).

Furthermore, items that were used in this study have been drawn from literature and semi-structured interviews conducted in Phase 1. The reviewed literature was from previous research that shares a similar context to the topic under study. The purpose was to generate a set of constructs by analysing the items from scales used in previous research and by creating additional items that would be suitable for the construct. This process followed the guidelines as suggested by Fink (2003) to determine constructs and items suitable for inclusion in the study. This was done by drawing upon and adapting construct items from research that had a similar context; which greatly improves the validity of this study. Some of the items were also adapted into the survey to incorporate the results from the semi-structured interviews (Phase 1).

Consequently, a set of scale items was generated with intent to capture data in order to facilitate in the development of the online shopping behaviour model. The derived scaled items are shown in Table 3.1. Additionally, demographics data, Internet usage, and purchase frequency were collected in the survey.



### 3.9.4 Construction of the Survey Instrument

The constructs and the item measures for the online survey are presented in Table 3.1. After the analysis of the semi-structured interview data, the factors that influence the online shoppers are more apparent. The factors include convenience, social, risk, product, and merchant. These constructs and items were drawn from the existing literature and adapted with the results from the analysis in phase 1 (semi-structured interviews). To examine the effects of the constructs on online shopping behaviour, the consumers' Internet usage, prior purchase experience, and demographic characteristics were also measured.

Constructs	Scale Items	Corresponding Questions	Source
Convenience Factor	Ease of use Convenient Shopping time Comparison shopping Information Search	Q2a, Q2b, Q2c, Q2d, Q2e	Dillon and Reif (2004) Researcher
Social Factor	Recommendations Reviews Enjoyment Sharing Encouragement	Q3a, Q3b, Q3c, Q3d, Q3e, Q3f	Childers et al. (2001) Park, Kim, and Forney (2006) Researcher
Risk Factor	Product risk Security risk Privacy risk Time risk	Q4a, Q4b, Q4c, Q4d, Q4e, Q4f	Jarvenpaa and Todd (1997) Dillon and Reif (2004) Shergill and Chen (2005) Researcher

Product Factor	Product pricing Product Information Promotions Wider selection	Q5a, Q5b, Q5c, Q5d, Q5e, Q5f, Q5g	Jarvenpaa and Todd (1997) Dillon and Reif (2004) Researcher
Merchant Factor	Shop interface Website design Usefulness Communication Responsiveness Delivery time Reputation Customer Service	Q6a, Q6b, Q6c, Q6d, Q6e, Q6f, Q6g, Q6h, Q6i	Dillon and Reif (2004) Shergill and Chen (2005) Researcher
Improvement Questions	Traditional vs Online shopping Delivery expectation	Q7a, Q7b	
Internet Usage Experience	Time spent online Internet Usage	Q1a, Q1b	
Prior Purchase Experience	Type of items purchased Number of items purchased Amount of items purchased	Q1c, Q1c, Q1d	
Demographic Characteristics	Age Gender Marital Status Ethnicity Education Employment Income	Q8a, Q8b, Q8c, Q8d, Q8e, Q8f, Q8g	

Table 3.1. Survey Questions Corresponding to Research Constructs and Items

The online survey questions (Appendix B) contains 8 parts. Question 1 was asked to elicit information about the consumers' internet usage and shopping experience. Questions 2 contained questions about the consumers' perception on convenience. Question 3 was designed to capture their perception on social.

Questions 4-6 captured the respondents' perception on risk, product, and merchant constructs. Question 7 inquired about the consumers' expectations when shopping online. And lastly, question 8 inquired about their demographic characteristics. These constructs and items were drawn and analysed from literature and semi-structured interviews and they are considered to have an influencing effect on the online consumers; hence they are included in the online survey to be analysed empirically.

### **3.9.5 Actual Purchase Behaviour Variable**

The dependent variable for this study is defined as the number of products or services purchased online over the last twelve months and it is intended to measure the actual purchase behaviour of the consumers. The dependent variable is labelled as 'online purchase'. A single item measure has been shown to be a highly accurate scale measure (DeVellis, 2003) and this has been shown in a study conducted by George (2004) who has also used a single item to measure the purchase behaviour.

### **3.9.6 Measurement Scale**

The online survey employed five point Likert scale on all the scale items (1= Disagree Strongly, 2= Disagree Somewhat, 3= Neither Agree or Disagree, 4= Agree Somewhat, and 5= Agree Strongly). For each question, respondents were asked how strongly they agree or disagree by choosing one of the five positions on a Likert scale. The questions were based on the themes explored from the literature review and the semi-structured interviews. The scale consists of a series of statements expressing either a favourable or an unfavourable attitude towards the topic under study. The respondents were asked to indicate the level of their agreement or disagreement with each statement by assigning it a numerical score. The results can then be analysed statistically using Statistical Package for Social Sciences SPSS (PASW 18).

### **3.9.7 Pilot Study**

Prior to finalising the survey questions, a pilot study was conducted on a sample of fifty-three participants ranging from academics and practitioners to regular shoppers. They were invited to comment on the validity, clarity, and relevance of

the questions within the survey. The participants included those who have shopped online before and those who have not. The pilot study helped to facilitate the development of the questionnaire design in that the feedback, results and analysis enabled the researcher to make some minor changes in the way in which some of the questions were presented and also to incorporate a few additional questions.

### **3.9.8 Sample Procedure**

A sample is a subgroup of the elements of the population selected to participate in the study (Dillon and Reif, 2004). The sample is drawn since it is usually impractical to investigate the entire population. Hence, the sample should be chosen carefully so that it can represent the population. Considerable attention was diverted towards the selection of a representative sample in the United Kingdom. It is important to choose the right sample since quantitative surveys are usually used to target samples of the population rather than the whole population.

There are two types of sampling methods: probability and non-probability (Malhotra, 2007). In this study, the non-probability sampling procedure was used. Non-probability is when the population is selected in a non-random manner. More specifically, the sampling method for this phase used the convenience sampling technique. According to Webb (1992), convenience sampling is one of the most common non-probability techniques. In order to reach a large population without being restricted geographically, a self-administered online survey was developed. Since it was self-administered, the participants completed the survey based on their own availability.

Given that researchers normally work to a 95% level of certainty (Saunders, Lewis and Thornhill, 2003), this study has adopted the same principle. This

means that at least 95 of these samples would be certain to represent the expected responses of the population if a sample was selected 100 times. According to Saunders, Lewis and Thornhill (2007), the minimum sample size required would be 384 people. With references to the sample size of previous studies that have been conducted with similar research design, 384 samples is considered appropriate. However, to increase the generalisability of this research, the researcher set a target to collect a sample of 1000 respondents.

Initially, there were concerns about recruiting a suitable number of participants for the survey. Access was difficult to gain despite the researcher's numerous attempts to contact many of the top websites in the United Kingdom to assist in this study. They were contacted to explore the possibilities of targeting their consumers for data collection. The goal was for them to distribute emails to their members asking them to spare some time to fill in the online survey. In return, they were offered a copy of the findings once the research is complete.

After an extensive search of potential sources to conduct the survey, access was granted to survey the community of the top most visited Business/Financial website for Business Information in the UK (Hitwise, 2010), [www.moneysavingexperts.co.uk](http://www.moneysavingexperts.co.uk). Gaining access to this important website was essential to increase the number of potential respondents without being limited to certain regions within the United Kingdom. MSE has held the top position on the most visited list every year since 2006. The sample collected on MSE was 470 participants.

Furthermore, the population at the University of Bolton was also targeted for data collection. Permission was granted by way of requesting the university to distribute electronic mails on the researcher's behalf. In total, 6000 emails were sent out to recruit potential University of Bolton participants, inviting them to complete the online survey. A sample of 562 University of Bolton respondents completed the survey; representing a response rate of 8.9%.

Thus, the final sample for online survey consisted of 1032 participants. While the sampled University of Bolton population consist about half of the overall sample size, it should be noted that the intention of the study is to increase the overall sample size to generalise the findings to better represent the UK demographics and thus, the benefits of the increased samples is considered more beneficial than limiting the sample to one population only. After data cleaning, the final number of usable responses was 983. The sample was diversified in terms of age, gender, education, employment situation, income, and Internet and purchase experience. The demographics information of the sample is summarised in Table 4.1 and Table 4.2.

Prior to the respondents entering the online survey, they were shown the covering page of the website to explain clearly and concisely the purpose of the survey, as suggested by Dillman, Smyth and Christian (2007) and Saunders, Lewis and Thornhill (2007). According to Dillman, Smyth and Christian (2007), including a covering letter on the front page of the survey can secure as high a response rate as possible. The respondents were also reminded that their participation was voluntary and that all data returned would be treated confidentially and anonymously.

### **3.9.9 Method of Quantitative Statistical Analysis**

It is important to choose the most appropriate statistical procedures to analyse the data to solve appropriate questions raised in the research (Creswell, 2003). In this study, the frequency distribution of each variable and scale, and its level of measurements were determined. The survey also employed continuous, categorical scales to quantify the variables.



The following statistical techniques were used to analyse and explore the relationships of the variables including: descriptive analysis; reliability analysis; comparing differences between groups using t-tests; analysis of variance (ANOVA); and correlation.

#### *3.9.9.1 Descriptive Analysis*

Descriptive analysis is a common technique and can be used to effectively describe the respondents' demographical characteristics, analyse the distribution of values of each item for the factors, and assess the validity of the data. This can be done by calculating the frequency distribution of each variable presented for data interpretation and examination. Numbers or percentages can also be used to describe the responses to the questions.

#### *3.9.9.2 Reliability Analysis*

Examining the reliability of data is important to measure the degree to which the scale produces consistent results if repeated measurements are made (Malhotra and Birks, 2006). Assessing the reliability of a scale or internal consistency is important to achieve a high degree of generalisability between the items. The most commonly used technique is finding the Cronbach's coefficient alpha to measure the internal consistency and estimate the average correlation of all the items in a scale. The values range between 0 and 1 with a higher value indicating greater reliability. As suggested by Hair et al. (1998) and Nunnally and Bernstein (1994), this study adopts an alpha coefficient of 0.60 to 0.69 which indicates a set of items to be within the lower limit of acceptability while a reliability estimate above 0.70 will be considered to be a highly reliable scale. The Cronbach's Alpha coefficients are computed for each of the factors that are identified to determine their reliability.

#### *3.9.9.3 Analysing Differences between Groups and Variables*

There are a few techniques to analyse the differences between groups and variables. According to Malhotra (2007), they commonly involve the comparison of the mean score of each group arising from one or more dependent variables.

#### *3.9.9.4 T-Test*

T-test investigates the mean values and can be used to explore the differences between groups (Creswell, 2003). It is a common method to use on two groups or two sets of data that have a variable which can be compared using mean scores. This study makes use of the independent sample t-test where two groups are compared by their mean scores to find any differences between the

two groups' intention to purchase online. If the p value of the 2-tailed t-test is less than 0.05, then it can be said there is a significant difference in the mean scores of the variable between the two groups (Creswell, 2003).

#### *3.9.9.5 One-Way Analysis of Variance (ANOVA)*

While T-test analyses the difference between the means of two groups, the one-way analysis of variance (ANOVA) is utilised to test the differences of two or more groups (Malhotra, 2007). Meanwhile, the two-way analysis of variance can test the impact of two independent variables on one dependent variable.

#### *3.9.9.6 Correlation*

Correlation can be used to describe the strength and direction of the linear relationship between two continuous variables. The Pearson correlation ranges from -1 to +1 which represents negative correlation and positive correlation respectively. Its value represents the relationship between the two variables. A correlation of 0 means there is no relationship; a correlation of -1 means a perfect negative correlation; and a correlation of +1 means a perfect positive correlation.

To determine if the relationships between two variables is significant, it is necessary to look at the correlation coefficient ( $r$ ). Cohen (1988) suggests interpreting  $r = 0.10$  to  $0.29$  or  $r = -0.10$  to  $-0.29$  as a weak strength of the relationship;  $r = 0.30$  to  $0.49$  or  $r = -0.30$  to  $-0.49$  as a moderate strength of the relationship; and  $r = 0.50$  to  $1.00$  or  $r = -0.50$  to  $-1.00$  as a strong strength of the relationship.

#### *3.9.9.7 Statistical Significance*

In this study, the sample size of  $n=983$  will be considered a large sample. It has been reported by Hair et al. (1998) and Pallant (2005) that in large samples, weak correlation coefficients between variables may reach statistical significance. Give the large sample size for this study, statistical analysis of significance may become sensitive to small changes. While it may be argued that  $p\text{-value} \leq .05$  may be considered statistically significant in smaller sample size (Hair et al., 1998; Krathwoh, 1997; Pallant, 2005), due to the large sample collected in this study ( $n=983$ ), the decision was made to only consider  $p\text{-value} \leq .01$  to be statistically significant.

#### **3.10 RESEARCH ETHICS**

The ethical consideration for this study is based on the University of Bolton ethical guidelines for conducting research. The RE1 form has been approved by the research ethics committee at the University of Bolton. The researcher has also attended relevant research ethics training and seminars in regards to issues relating to the rights of researchers and those who are researched. All participants were aware of the purpose of the research, their informed consent was obtained, and their privacy and confidentiality has been strictly adhered to.

#### **3.11 VALIDITY AND RELIABILITY OF RESEARCH FINDINGS**

Reliability refers to the extent to which the data collection techniques or analysis procedures will yield consistent findings. To minimise any potential bias in the study, the inclusion of semi-structured interviews (qualitative method) and online survey (quantitative method) was necessary to increase the validity and

reliability of the research. Furthermore, prior to conducting the semi-structured interviews (Phase 1) and the online survey (Phase 2), the interview and survey questions were piloted on a sample consisting of academics, practitioners, and regular shoppers. The purpose was to increase the validity, clarity, and relevance of the interview and online survey questions.

The mixed method research adopted in this research enables triangulation to take place. Triangulation is the use of two or more independent sources of data or data collection methods within one study (Saunders, Lewis and Thornhill, 2003). The combination of literature review, qualitative, and quantitative methods greatly improve the validity and in turn increase the reliability of the research findings as well as allowing the generalisability of this research (Easterby-Smith, Thorpe and Lowe, 2002).

### **3.12 CHAPTER SUMMARY**

This chapter introduced various research philosophies, approaches, and methods and provided justification of the choices that were. This study utilised a combination of qualitative and quantitative methods where qualitative data was first collected and analysed and followed by a second phase of quantitative data collection and analysis. The main advantage of doing so was that the findings from the qualitative phase could be extended to a wider and more representable population. The chapter ended with a discussion of the research ethics and the validity and reliability of the research findings.

## **4 DATA ANALYSIS and DISCUSSION**

### **4.1 CHAPTER OVERVIEW**

This chapter presents the results and discussions of the data collected from the semi-structured interviews and online survey. The analyses and discussions to find patterns and relationships are discussed which leads to the development of the online decision purchasing model. Lastly, the final suggested model for online consumer behaviour will be reviewed. This model integrates the findings from the literature, semi-structured interviews, and the online survey to ultimately capture the factors that influence the online shoppers.

### **4.2 QUALITATIVE DATA ANALYSIS**

The data collected from semi-structured interviews were analysed and the frequency that key phrases or words occurred was tallied from the responses received. The interviewees' responses data was then categorised into prominent themes or patterns to identify the various aspects that influence online shoppers.

Semi-structured interviews were conducted in two stages:

1. Forty-one participants, including those who had shopped online and those who had chosen not to shop online, were targeted in the first stage to obtain information about Internet shopping. This initial stage helped to identify the general issues and the development of the key areas that would be relevant to Internet shoppers.
2. A further twenty-eight people who had had previous experience shopping online were invited to comment on the findings of the above. This later stage

provided the opportunity to further develop in-depth discussions surrounding the general issues that were identified in the initial stage.

#### **4.2.1 Stage 1 Results from Semi-structured Interviews**

Semi-structured interviews were conducted in two stages. The first stage involved forty-one participants to identify the general issues surrounding the topic of online shopping to identify the key areas that influence the shoppers. The interview procedure and results from stage 1 are discussed below.

The purpose of collecting data using semi-structured interviews was for its flexibility and versatility in acquiring rich and detailed information surrounding the participants' perception of online shopping. The interview explored the participants' demographical characteristics, internet and shopping experience, benefits/risks of shopping online, and generally the topics surrounding original themes gathered from the literature review including consumer characteristics, consumer perception, product/service characteristics, and merchant characteristics. Seven relevant questions were constructed and presented to the participants during the semi-structured interview (Appendix A).

Before the start of each interview, the participants were told of the purpose of the academic-purpose interview and the confidentiality of their data, and their right to withdraw from the interview at any time. The average duration of the interview was thirty minutes. This allowed time for asking the interview questions, asking supplementary questions for clarification and asking for more details if necessary without the respondents feeling rushed. The most important advantage of semi-structured interviews was the flexibility, allowing the researcher to probe deeper into the questions when required in order to gain valuable information from the participants.

The sample consisted of forty-one participants: a total of ten were aged below 25; sixteen between 26 and 35; twelve between 36 and 45; and three over 45. The mean age of the sample was 31.5 years old. Nineteen of them were males and twenty-two were female.

The sample included participants who have shopped online and also those who have never shopped online in order to understand the issues that influence online shoppers. The majority of the interviewees had experience purchasing online. They were encouraged to share their thoughts on both the positive and negative aspects of online shopping. For those who had never shopped online, more explorative questions concentrated on the reasons why they had not.

Throughout the semi-structured interviews, guidelines for conducting effective interview procedures were followed. Questions were kept open ended and were designed to gather the respondents' thorough responses surrounding the topic. The researcher listened attentively and responded appropriately to the respondents' answers. Their responses were then identified and generated into prominent themes and triangulated with the literature. The findings are generally in line with previous studies; however, as a result of the growth and experience and sophistication of online shoppers there are new and emerging factors that are considered to be important.

Price was mentioned by the majority of the participants concurring that cheaper prices can usually be found online. This was further supported by the availability of discount vouchers and promotions. The participants also found that comparison facilities and product reviews are very useful and have become a big influence on their decision to purchase. Some also stated that there are "more to choose from" when referring to the range of items available from online shopping.



“Convenience” was identified by over 75% of the participants as one of the reasons for shopping online, as it can be done anytime of the day and from anywhere. Some mentioned the “lack of time” to travel to high street stores to purchase because of their work while others mentioned the “inconveniences of travelling” without their own transportation and the inability to travel due to physical disabilities. On the other hand, some participants commented that they disliked having to “wait” or “stay at home” for the item to arrive.

Over 60% of the participants suggested that they would be more likely to purchase from online retailers that are perceived to be “reliable”, “well-known”, “responsible” and “honest”. They also believed that they would be more willing to purchase again from the same online retailer if they were satisfied with a previous purchase experience. 78% of the respondents commented that if they had had a positive shopping experience with the brick-and-mortar (high street) store before, they would be willing to purchase from the retailer’s online shop as well. Interestingly, they added that they could usually find “more products” being sold from the online equivalent while others mentioned that it was sometimes even “cheaper”.

The “safety of online transaction” was frequently raised by over 80% of the respondents. Online shoppers are worried about their “security” and “privacy” when shopping online. Some respondents stated that they have decided not to follow through with a transaction because the website did not appear to be “secure”. The interviewees expressed a dislike to receiving “spam”; referring to the advertisement, via emails, that was sent to their email addresses without their prior consent. However, they suggested that they would be more receptive to promotional emails from online retailers if they were given “vouchers”, “discounts” and “special offers” as incentives to purchase. “Security” and “privacy” were also reported as a major area of concern by the participants who have never shopped online or have had little past experience of shopping

online. They also mentioned that they would rather “touch and feel” the product when wishing to purchase an item.

The participants mentioned the ease of shopping frequently online; however, when faced with a request by the online store to create an account, a minority of interviewees did not feel comfortable and were reluctant to go ahead. The results suggest that whilst some online shoppers prefer to check out quickly by entering as little information as possible about themselves online, others would rather enter all their information by saving their details in an account so that it will be more convenient the next time they wish to purchase from the same retailer.

Many of the participants indicated their high expectations of the “website design” and “usability” provided by the online stores. Some reported that poor design and functionality and difficulty in navigation and finding products/information often led to a non-purchase decision. Many respondents also considered “reviews” and “price-comparison” facilities to be useful in assisting their purchasing decision. Customer reviews were generally considered useful as they offer neutral advice when making a purchasing decision. The participants were mostly intrigued by the number of friends and family using “social networking” sites as well.

Over 60% of the participants expressed that upon a positive experience, they would be willing to spread the word and recommend the online stores to friends and family. Some participants also mentioned that they use shopping discussion forums to identify “good deals”. Also, recommendations from family and friends are often important to them. The participants believed that the websites should be easy to use; have search function facilities for easier browsing; have detailed product description; and that they should be fast and attractive. They also expect the websites to have good customer services that respond quickly and offer product tracking facilities after purchase. Additionally, the interviewees

revealed that they are more likely to purchase if the online retailer offers free shipping and returns, or cheap shipping.

The common themes that can be associated with the positive factors affecting the online consumers include the following: cheaper prices; convenience; ease of use; easy access to research a product; compare reviews; and the ability to comparison shop quickly. In general, price and convenience were mentioned most frequently during the semi-structured interviews.

The common themes that can be associated with negative factors affecting the online consumers include the following: security of the online transaction; privacy of the personal information; delay of shipment; and the inability to track the item's arrival. In general, security and privacy associated with the safety of online transactions were mentioned most frequently during the semi-structured interviews.

The common themes that can be associated with increasing the satisfaction of online consumers include the following: useful website functions; website loading time; personalisation; friendly and prompt online and offline customer services; and the availability of incentives including discount vouchers, promotions and the reduction of delivery time.

Participants from the semi-structured interviews also revealed their dissatisfaction with online shopping on a number of occasions, but felt the positive experiences in previous successful transactions outweighed the negatives. What they seemed to miss most compared to traditional shopping was that they could not see and inspect the item before purchase. The influence of family, media, and friends was also perceived to be important.

This stage provided a very useful basis to understand the current issues of online shopping. All in all, themes that were deemed important emerged after analysing the interview data. It helped to identify key areas for further discussion with the participants in the second stage of the semi-unstructured interviews. The next stage was designed to provide an opportunity to discuss with the participants the findings from the first stage in order to further develop in-depth discussions surrounding the key themes that emerged.

#### **4.2.2 Stage 2 Results from Semi-Structured Interviews**

Following the same interview procedure as in the first stage, the participants were asked questions regarding the key areas gathered from stage 1. The key areas that were discussed include convenience, social influences, perceived risks, product characteristics, and merchant characteristics. These areas were gathered from the analysis in the first stage where the participants' responses were categorised into these five influencing themes.

Twenty-eight people participated in the semi-structured interviews. Eight were aged below 24; eight between 26 and 35; six between 36 and 45; and six over 45. Ten of them were males and eighteen were female. Their responses are presented based on the five themes that were categorised from stage 1.

89% of the respondents interviewed believed the "convenience" theme as a reason they shop on the Internet. The respondents mentioned they had "little time to shop" and believed Internet shopping is a "great time-saving" tool. The general response was online shopping is "quick", "easy", "saves time" especially if the item is a fair distance away if the buyer had to travel. Those who live far away from the city also agree with the benefit of not having to "travel" to buy. Furthermore, respondents mentioned their dislikes for "queues" so they shop online instead. Furthermore, a few respondents have talked about friends or

family being “disabled” and that online shopping allowed them to be “independent” without needing to depend on family or friends to help with their shopping needs.

71% believe the “social influence” theme have an influence on their purchase intention. Many of the participants commented that they “tell friends and family” if they find a good deal online. Referring to reviews, a few respondents mentioned that they try to read “as many reviews as possible” before making a purchase. Some respondents mentioned that there is a need to “read more” reviews in order to get a more accurate picture. Generally, “sharing” deals, freebies, and voucher information were something the respondents do not hesitate to do when they come across a good find.

86% believe they are affected by “perceived risks” theme. Many of the participants believe “security” is a big concern. They sometimes “lack trust” and “feel unsafe” on particular websites. Item arrived looking “different” compared to when how it looks online was mentioned as well. But many of them mention that they are willing to “take risk” if it’s a “well-known” company. A few respondents commented on the “credit card protection” and even if they are “scammed” they are “covered by the protection”.

86% believe they purchase online due to the “product characteristics” theme. Many of the participants commented about “cheaper prices” and the “significant difference” between high street and online shopping. Others also mentioned about the “ease” of “comparing prices”. A few respondents mentioned about obtaining items that are “difficulty to locate” in shops and praise the “range of products” that are available. The majority of the respondents believed that prices are quite often better online when compared to traditional shopping.

80% believe “merchant characteristics” theme play a part on whether they buy from an online store. A few respondents commented about big name companies

as their “first choice” but they would use smaller stores if they are “cheaper”. The “reputation” of the website was mentioned frequently as well. Website features that were mentioned most include “search”, “quick load time”, “easy to use”, “tracking”, and “safe”. Some respondents commented that “customer service” was important to their decision to purchase as well. Delivery was very important to the respondents and that they expect to receive the purchased items within the “delivery time” that the online stores stated.

The above was a summary of the responses from the respondents regarding each of the five themes. It was found that the factors that the respondents believe as influential to their decision to purchase online mostly fall within the five themes as described above. After triangulating the results with the theoretical findings from the literature review and the data collected in the first stage, it became apparent that the five themes were supported as the key factors that influence the online shoppers.

The next stage collected quantitative empirical data to attempt to extend the results from phase 1 (semi-structured interviews) to a more representable sample. From the data collected in the semi-structured interview phase, the five themes were translated into variables and provided a useful set of factors that influence online shoppers. This facilitated in the development of the online survey in the next phase which evolved around the five influencing factors of convenience, social, risk, product, and merchant factors. As mentioned previously, a disadvantage of the qualitative method is the concern of generalisability (Brannen, 2005; Creswell, 2003; Onwuegbuzie and Leech, 2005). Thus, the inclusion of the next phase where an online survey was chosen as the main distribution method can allow the data to be linked to a statistically representative sample.

### **4.3 QUANTITATIVE DATA ANALYSIS**

Statistical analyses were used to analyse the various relationships between variables and groups that affect the purchasing decision of online shoppers. By analysing these relationships, it can facilitate the development of the online consumer behaviour model. The descriptive analysis was conducted to provide a profile of the characteristics of the respondents, Internet usage, and shopping behaviour. Thereafter, the reliability analysis (Cronbach's Alpha) was conducted to test the internal consistency of the data collected. Correlation was used to explore the relationships between the variables. Furthermore, t-test and analysis of variance (ANOVA) was also conducted to explore the effects of demographic characteristics variables on the various factors that influence online shoppers' decisions to purchase.

#### **4.3.1 Data Preparation and Cleaning**

The data collected from the online survey was first inspected for omissions or errors in Microsoft Excel 2010. There were 1032 surveys that were received. The data for each participant was reviewed and any responses that had omissions or errors were edited and coded as missing before being imported into Statistical Package for the Social Sciences (SPSS PASW 18) for tabulation and analysis. The variables in the dataset were then defined, coded, and labelled appropriately. The value labels were assigned to the different groups and the level of measurements were also indicated. The dataset was checked for any duplicate entries, missing values, discrepancies and any errors were rectified. During the data cleaning stage, 49 responses had to be deleted because of duplication; the respondents' failure to complete more than half of the survey; or submission of falsified data as indicated by pattern responses



(Dillman, Smyth and Christian, 2007). The number of final valid responses was 983 (n=983).

#### 4.3.2 Demographic Analysis of Respondents

Through the self-administrated online survey, 1032 responses were collected. After data cleansing, a total of 983 usable cases (n=983) were used for analysis. According to various authors including Dillman, Smyth and Christian (2007); Saunders, Lewis and Thornhill (2007); Tabachnick and Fidell (2007), the sample size was sufficient for the purpose of the study and compared with the sample size of previous studies that have been conducted, a sample of 983 responses was deemed suitable for further statistical analysis. Table 4.1 provides a summary of the demographic profile of the respondents.

Variable	Frequency	Percentage %
<b>Gender</b>		
Male	450	46.6
Female	516	53.4
<b>Age</b>		
Under 24 years old	340	34.7
25-34 years old	216	22.0
35-44 years old	212	21.6
45-54 years old	158	16.1
Over 54 years old	54	5.5
<b>Marital Status</b>		
Not married	611	62.9
Married	361	37.1
<b>Education Level</b>		
Doctorate Degree	22	2.2
Postgraduate Degree	206	21.0
Bachelor Degree	324	33.0



Further Education (e.g. College)	212	21.6
A Level	144	14.6
GCSE/O-Level	38	3.9
<b>Ethnic Group</b>		
White	759	81.4
Asian or Asian British	64	6.9
Black or Black British	53	5.7
Chinese or Chinese British	37	4.0
Other	20	2.0
<b>Employment Status</b>		
Student	404	41.6
Employed full-time	339	34.9
Employed part-time	106	10.8
Unemployed, seeking employment	27	2.8
Not seeking employment	42	4.3
Retired	27	2.8
Self-employed	26	2.7
<b>Income</b>		
Less than £10,000	117	15.6
£10,000-19,999	139	18.5
£20,000-29,999	118	15.7
£30,000-39,999	101	13.5
£40,000-49,999	38	5.1
£50,000-75,000	19	2.5
Over £75,000	10	1.3

Table 4.1. Demographic Characteristics of Respondents

The sample included a diverse combination of respondents from all demographics. A descriptive analysis of the respondents' demographics found an almost even mixture of male (46.6%) and female (53.4%) respondents. 56.7% of the respondents were under 35 years old and 43.3% were aged 35 years and older. The respondents were predominantly single. 62.9% declared themselves single whilst 37.1% were married. Finally, the majority classified themselves as white (81.4%), followed by Asian (6.9%) and Black (5.7%).

A third of the respondents (34.3%) held an undergraduate degree; 23.9% had graduate degrees; and 41.8% had received further education or lower. With reference to their employment status, it was mainly split into two groups consisting of 41.7% students and 48.4% employed (part time, full time, or self-employed). Half of the respondents (65.9%) reported an income of more than £20,000, with the majority of the respondents falling between £10,000 and £19,999.

The data on the Internet usage and purchase frequency of the respondents is shown in Table 4.2. More than two thirds of the respondents (71.9%) accessed more than eleven hours of the Internet each week whilst almost half of the respondents spent 11-30 hours per week online (46.8%). The majority of the respondents indicated that they had purchased products more than ten times on the Internet over the last twelve months while almost half of the respondents (47.6%) had purchased 6-20 times online overall. In terms of the amount spent, two-thirds of the respondents (67.0%) had spent over £200 purchasing items online in the past year.

Variable	Frequency	Percentage %
<b>Hours spent using the Internet per week</b>		
1-5 hours	102	10.4
6-10 hours	174	17.7
11-20 hours	267	27.1
21-30 hours	189	19.2
31-40 hours	110	11.2
More than 40 hours	142	14.4
<b>Number of times purchased on the Internet in the last 12 months</b>		
1-5 times	164	16.7
6-10 times	231	23.8
11-20 times	232	23.8

21-30 times	170	17.3
31-40 times	65	6.6
More than 40 times	117	11.9
<b>Amount spent purchasing on the Internet in the last 12 months</b>		
£1-50	50	5.1
£51-100	110	11.2
£101-200	164	16.7
£201-400	194	19.7
£401-600	136	13.8
More than £600	325	33.5

Table 4.2. Internet Usage and Purchase Frequency

Figure 4.1 and Figure 4.2 displays the various tasks the respondents do and the type of items they purchase on the Internet.

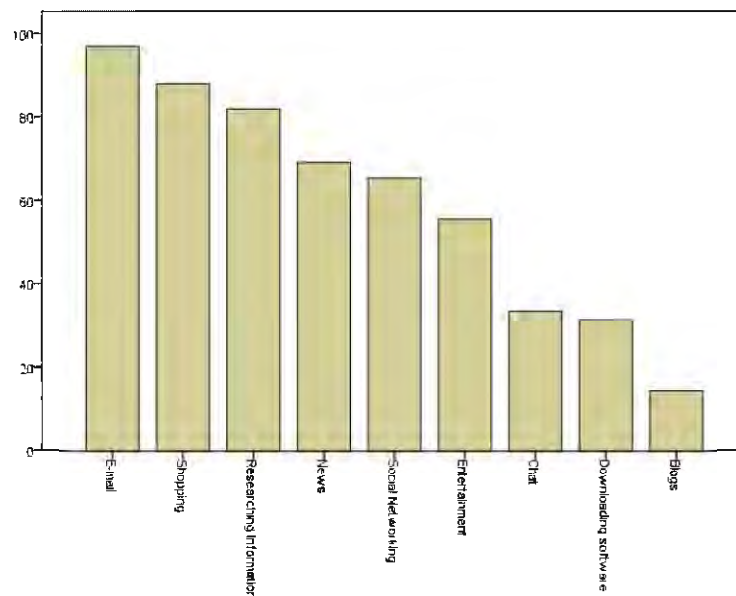


Figure 4.1. Internet Usages for Personal Purpose (in Percentages)

Figure 4.1 shows the nine categories of Internet usages of the respondents. It was revealed that email was most often used by the participants with 96.8%. This was followed by shopping with 87.9% and researching information with 81.9%. Other commonly use on the Internet include: news 69.1%; social

networking 65.3%; entertainment 55.5%; chat 33.5%; downloading software 31.3%; and blogs 14.4%.

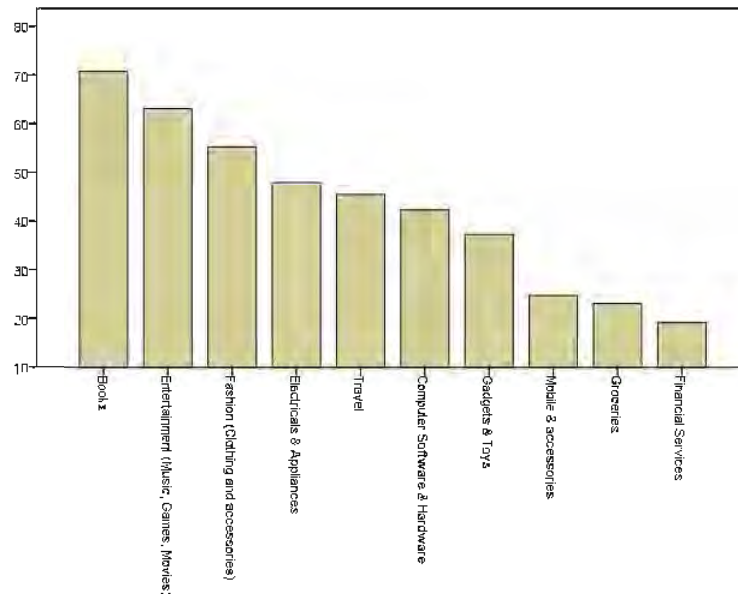


Figure 4.2. Ten Most Purchased Categories for Personal Use (in Percentages)

Figure 4.2 presents the most purchased product categories according to the respondents over the last 12 months. Books were the most frequently purchased item with 70.7%. Entertainment (63.1%) and fashion (55.2%) represented the second and third most frequently purchased items. Other commonly purchased items include: electronics and appliances 52.1%; travel 45.5%; computer software and hardware 42.3%; gadget and toys 37.2%; mobile and accessories 24.7%; groceries 23.1%; and financial services 19.2%. Overall, the types of items purchased by UK consumers are in line with products that are purchased by online shoppers worldwide.

Furthermore, two additional questions were proposed to the respondents to inquire about what is they miss most about traditional shopping when compared to online shopping and how many days would they expect an item purchase

online to arrive. The questions provided excellent information on the consumer's concerns and expectations of online stores during the exploratory (semi-structure interviews) stage and hence they are included as questions in the online survey as well.

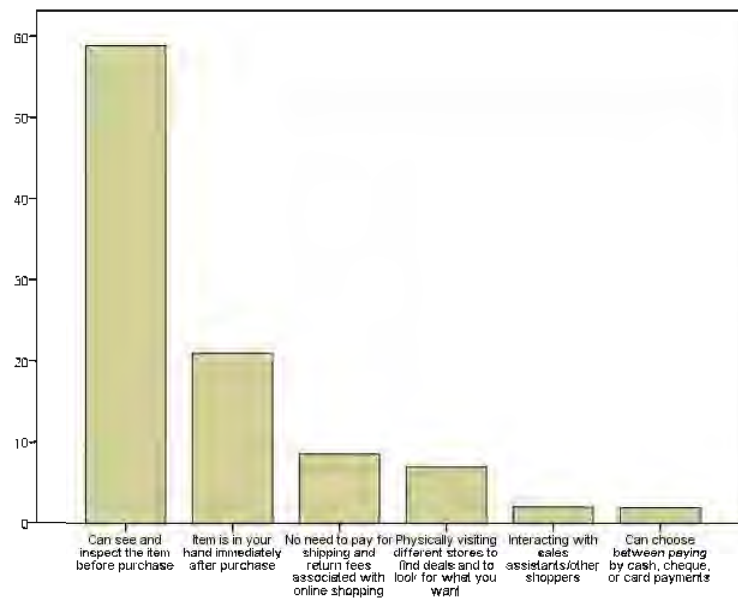


Figure 4.3. Percentage Distribution of what Consumers Miss Most about Traditional Shopping

The participants were asked "what they miss most about traditional shopping" when compared to online shopping and the results is displayed in Figure 4.3. It was revealed that the most important attribute they miss most is to "see and inspect the item before purchase" with 59.6% of the participants agreeing. This was followed by 21% of the participants valuing that the "item is in your hand immediately after purchase". "No need to pay shipping and return fees associated with online shopping" with 8.5% and "physically visiting different stores to find deals and to look for what you want" with 6.9% were less popular choices. Lastly, only 2% picked "Interacting with sales assistances/other shoppers" and 1.9% picked "can choose between paying by cash, cheque, or card payments".

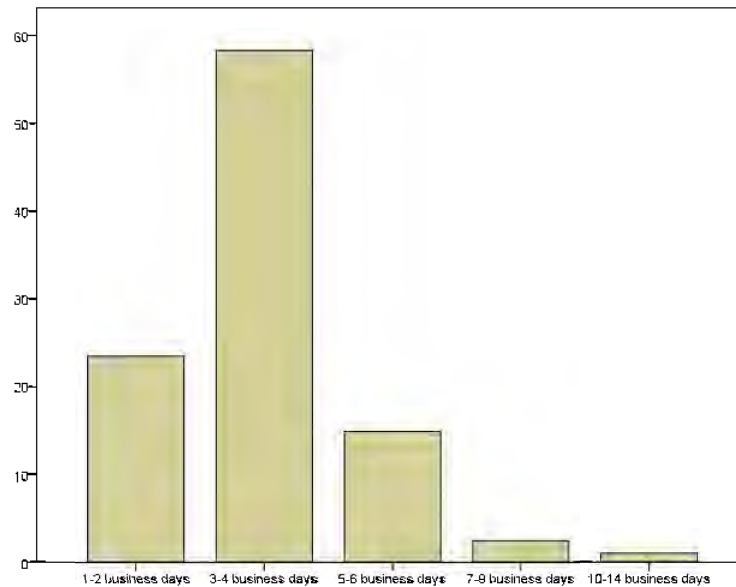


Figure 4.4. Percentage Distribution of Number of Working Days Consumers Expect to Receive the Item after Purchase

The participants were asked how many days did they expect the item of they purchase to arrive and the results are displayed in Figure 4.4. 58.2% of the respondents believe they should receive the item within 3-4 business days and followed by 23.4% of the participants expecting the item to arrive within 1-2 business days. The other choices were "5-6 business days" 14.9%; "7-9 business days" 2.4%; and "10-14 business days" 1.0%.

The data obtained in this study is diverse in capturing the essence of the various demographics and it is submitted that the respondents' internet usage and purchase frequency is in line with similar studies that have been completed. The Internet usage and shopping experience of the respondents reinforces the notion that the Internet has become a regular part of many people's lives.



### 4.3.3 Reliability Analysis

First, the reliability of the scales was tested to ensure consistent results if repeated measurements were made. Through reliability analysis, the construct factor structures and its reliability of the survey instrument scales were examined. In order to test the internal consistency, the Cronbach's Alpha coefficients were found for each construct's variables. As suggested by (Hair et al., 1998) and Nunnally and Bernstein (1994), an alpha coefficient of 0.60 to 0.69 for a set of items is the lower limit of acceptability while a reliability estimate above 0.70 is considered to be a highly reliable scale. The coefficients were examined for each of the constructs that were identified to determine their reliability.

Factor	Cronbach's Alpha Coefficients
Q2 Convenience Factor	0.741
Q3 Social Factor	0.690
Q4 Risk Factor	0.755
Q5 Product Factor	0.660
Q6 Merchant Factor	0.831

Table 4.3. Reliability Analysis of the Scales (Cronbach's Alpha)

As displayed in Table 4.3, the reliability estimates for each factors were: Convenience (0.741); Social (0.690); Perceived Risks (0.755); Product (0.660); and Merchant (0.831). Three of the reliability estimates were above 0.7, indicating a high reliability, with the exception of the Social and Product factors which were within the lower limit of acceptability (Hair et al., 1998). Since the two constructs are at the high end of 0.60, it is submitted that they are acceptable to be included for further analysis. Overall, the reliability analysis of the constructs indicates a reliable internal consistency of the items.

#### **4.3.4 Analysis of the Factors**

To examine how consumers perceive each of the factors associated with online shopping, the mean scores of the items within each construct are explored. The discussion in this section is aimed at exploring how the online consumers perceive the agreement of the variables in relation to the five factors (convenience, social, risk, product, and merchant). The factors mean scores are presented as follows: Convenience factor (Table 4.4); Social factor (Table 4.5); Perceived Risk factor (Table 4.6); Product factor (Table 4.7); and Merchant factor (Table 4.8).

##### *4.3.4.1 Convenience Factor*

The convenience factor construct consists of five items. They have been tested for internal consistency based on the standard reliability assessment of measuring the Cronbach's Alpha. As shown in Table 4.3, the Cronbach's Alpha value for the convenience construct is 0.741, indicating a highly reliable internal consistency of the items.

The convenience factor comprises of five independent variables including: Q2a) I save time by shopping online; Q2b) I find it convenient to shop online at anytime; Q2c) It is easy to shop online; Q2d) It is easy to compare products when shopping online; and Q2e) It is easy to compare prices when shopping online. Table 4.4 presents the descriptive summary of the mean scores of each of the variables along with the overall mean score of the convenience factor.

A five point Likert scale was employed to inquire about the degree to which the respondents agree or disagree with each of the variables (1= Disagree Strongly, 2= Disagree Somewhat, 3= Neither Agree or Disagree, 4= Agree Somewhat,



and 5= Agree Strongly). Hence, a mean score of 3.0 or higher would indicate an agreement with the particular item.

Convenience Factor Statistics				
	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Q2c) It is easy to shop online.	982	4.50	0.023	0.726
Q2a) I save time by shopping online.	978	4.37	0.027	0.858
Q2e) It is easy to compare prices when shopping online.	973	4.35	0.026	0.812
Q2d) It is easy to compare products when shopping online.	981	4.12	0.031	0.964
Q2b) I find it convenient to shop online at anytime.	975	4.06	0.03	0.933
Factor Mean Score	959	4.28	.020	.606

Table 4.4. Convenience Factor Mean Scores

All five items within the convenience factor construct have high mean scores of over 4.0. Specifically, “Q2c) It is easy to shop online” received the highest mean score within this factor construct (M=4.50). It is also the third highest mean score when compared to the scores amongst all the variables being investigated in this study. This is testament that online shoppers greatly value how easy it is to purchase over the Internet. Also, the other four variables surrounding the questions of ‘saving time’ (M=4.37), ‘easy to compare products’ (M=4.35), ‘easy to compare price’ (M=4.12), and ‘convenience’ (M=4.06) have all scored > 4.0 , which is a strong indication that the variables categorised in the convenience factor construct are strong antecedents to the commitment of online shoppers. All the variables within this construct are higher than the overall mean score of the five factors (M=4.03). Naturally, the convenience factor construct has the

highest mean score amongst all five of the factors ( $M=4.28$ ,  $SD=.606$ ). With both the factor mean score and all the variables scoring above the overall factors' mean score of 4.03, this indicates the consumers' strong agreement of the importance that the various aspects of convenience need to be satisfied in order to influence their decision to purchase online.

#### 4.3.4.2 Social Factor

The social factor construct consists of six items. The Cronbach's Alpha coefficient has been adopted as the testing standard to examine the internal consistency of each item. As shown in Table 4.3, the Cronbach's Alpha value for the convenience construct is 0.690 which is within the limit of reliable internal consistency of the items (Hair et al., 1998).

The social factor comprises of six independent variables including: Q3a) It is enjoyable to shop online; Q3b) I have often been encouraged to shop online; Q3c) I would recommend a website to others if I'm satisfied with my shopping experience at a particular website; Q3d) Product reviews from other consumers are useful; Q3e) Product reviews from experts are useful; and Q3f) I often check product reviews before I make a purchase. Table 4.5 presents the descriptive summary of the mean scores of each of the variables along with the mean score of the social factor.

**Social Factor Statistics**

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic

Q3c) I would recommend a website to others if I'm satisfied with my shopping experience at a particular website.	981	4.28	0.023	0.73
Q3d) Product reviews from other consumers are useful.	982	4.22	0.026	0.81
Q3e) Product reviews from experts are useful.	973	4.05	0.027	0.828
Q3a) It is enjoyable to shop online.	983	3.98	0.028	0.874
Q3b) I have often been encouraged to shop online.	980	3.33	0.032	0.997
Q3c) I would recommend a website to others if I'm satisfied with my shopping experience at a particular website.	981	4.28	0.023	0.73
Factor Mean Score	958	3.91	.0182	.562

Table 4.5. Social Factor Mean Scores

Similar to the previous construct, a five point Likert scale (1= Disagree Strongly and 5= Agree Strongly) was used. A mean score of over 3.0 would indicate the respondents' agreement with the particular item.

The social factor construct consists of seven items that scored over 3.0. The highest scoring variable is Q3d) I would recommend a website to others if I'm satisfied with my shopping experience at a particular website (M=4.28) which confirms that if the consumers are satisfied with their shopping experience at a particular website they are willing to share this information with their peers and family. This also relates closely to Q3e) Product reviews from other consumers

are useful ( $M=4.22$ ) and Q3e) Product reviews from experts are useful ( $M=4.05$ ); where the online buyers are believed to be responsive to the reviews from other consumers and experts.

However, along the same lines of review, the mean score of Q3f) I often check product reviews before I make a purchase was  $M=3.55$  and although it is still  $>3.0$ , indicating the majority agreement of this statement, it is well below the overall mean score of the factors ( $M=4.03$ ). This reveals that although consumers value product reviews from others, they are not keen on spending time looking for product reviews and this suggests that websites incorporating the product reviews and comparison into their web facility to help the online buyers make a more informed decision to purchase would increase a buyer's likelihood of purchasing a product online.

The lowest scoring variable in the social factor construct was Q3b) I have often been encouraged to shop online ( $M=3.33$ ). It has the second lowest mean amongst all the variables in this study. However, it relates closely to the sample where they are online users and already shop online and hence, there will not be as much encouragement needed from others to convince them about the benefits of online shopping.

Overall, the mean score for the social factor construct was 3.91 ( $SD=.562$ ). This is an indication that the consumers find the various aspects of the social factor to be influential on their decision to purchase online. The mean score is slightly below the overall mean score of the five factors ( $M=4.03$ ), but as discussed in this section, it is contributed mostly by the low score of Q3b which is contributed by the fact that the respondents are online users and buyers, hence they are less likely to be encouraged to shop online by peers.

#### 4.3.4.3 Risk Factor

The perceived risk factor construct consists of six items that have been tested for their internal consistency using the Cronbach's Alpha reliability assessment. The coefficient of this test for the convenience construct is 0.755, indicating a highly reliable internal consistency of the items (Table 4.3).

The risk factor consists of the following six independent variables including:

Q4a) I am concerned about my security when purchasing online; Q4b) I am concerned about my privacy when purchasing online; Q4c) I am concerned about making the wrong purchase decision as I am unable to touch or examine the products before I make the purchase online; Q4d) I am concerned that the items I purchase online will not arrive in time for my needs; Q4e) I am concerned that the items I purchase online will be lost or damaged during the delivery; and Q4f) I am concerned about the shipping cost to return unwanted/unsuitable items. Table 4.6 presents the descriptive summary of the mean scores of each of the variables along with the mean score of the risk factor.

Risk Factor Statistics				
	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Q4a) I am concerned about my security when purchasing online.	974	4.58	0.024	0.761
Q4b) I am concerned about my privacy when purchasing online.	976	4.46	0.026	0.807

Q4c) I am concerned about making the wrong purchase decision as I am unable to touch or examine the products before I make the purchase online.	979	3.64	0.033	1.022
Q4d) I am concerned that the items I purchase online will not arrive in time for my needs.	978	3.43	0.033	1.048
Q4e) I am concerned that the items I purchase online will be lost or damaged during the delivery.	976	3.26	0.035	1.088
Q4a) I am concerned about my security when purchasing online.	974	4.58	0.024	0.761
Factor Mean Score	951	3.84	.021	.647

Table 4.6. Risk Factor Mean Score

The responses for the variables of this construct were collected using a five point Likert scale (1= Disagree Strongly and 5= Agree Strongly). The mean score of over 3.0 would indicate the respondents' agreement with the particular item.

The two highest scoring variables in the risk factor were Q4a) I am concerned about my security when purchasing online (M=4.58) and Q4b) I am concerned about my privacy when purchasing online (M=4.46). Consequently, these two variables have the first and fourth highest mean scores respectively amongst all the variables. Undoubtedly, 'security' and 'privacy' are what the online consumers perceive to be of high importance. On the other hand, other



variables within the risk construct scored considerably lower, with Q4g) I am concerned that the items I purchase online will be lost or damaged during the delivery (M=3.26) being the lowest in this construct but also the lowest rated mean amongst all the variables in this study. This could be an indication that consumers are satisfied with the postal and courier services that retailers use to send the products purchased. The other variables fared slightly better and along the same lines of product risks, including 'purchasing the wrong item' (M=3.64); 'cost of return of unsuitable item' (M=3.64); and 'delivery time' (M=3.43).

Although the mean score for this construct is below the overall mean score of (M=4.03), all six variables in the risk construct scored over 3.0 which would indicate the consumer's concern over the various risk aspects associated with online shopping. The mean for the risk factor construct is 3.84 (SD=.647) which suggests that the perceived risk is still an influencing factor that can affect online shoppers' decisions to shop online.

#### *4.3.4.4 Product Factor*

The product factor construct consists of seven items. They have been tested for their internal consistency based on the standard reliability assessment of measuring the Cronbach's Alpha value. As shown in Table 4.3, the Cronbach's Alpha value for the convenience construct is 0.660 and is considered reliable but within the lower internal consistency of the items (Hair et al., 1998).

The product factor comprises of seven independent variables including: Q5a) I can usually find better prices and promotions when shopping online; Q5b) I shop online because of the competitive prices; Q5c) Promotions (e.g. sales, vouchers, gifts, etc.) are attractive to me; Q5d) I shop online because of the better promotions and discounts; Q5e) Shopping online offers a wider selection of products/services to choose from; Q5f) The product information is relevant



and easy to understand; and Q5g) I can find detailed information about the product online. Table 4.7 presents the descriptive summary of the mean scores of each of the variables along with the overall mean score of the product factor.

Product Factor Statistics				
	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Q5b) I shop online because of the competitive prices.	974	4.46	0.023	0.721
Q5a) I can usually find better prices and promotions when shopping online.	978	4.38	0.026	0.822
Q5e) Shopping online offers a wider selection of products/services to choose from.	979	4.11	0.029	0.92
Q5c) Promotions (e.g. sales, vouchers, gifts, etc.) are attractive to me.	977	3.6	0.032	1.002
Q5d) I shop online because of the better promotions and discounts.	974	3.36	0.038	1.184
Q5b) I shop online because of the competitive prices.	974	4.46	0.023	0.721
Q5a) I can usually find better prices and promotions when shopping online.	978	4.38	0.026	0.822
Factor Mean Score	950	4.03	.017	.512

Table 4.7. Product Factor Mean Scores

With the exception of two variables, the five remaining variables had a mean score of over 4.0. The responses for each variable were collected using a five point Likert scale system in which a respondent's choice of 3.0 would indicate his/her agreement with the variable. The highest rated variables in the product factor construct related to the price advantage of online shopping. The respondents scored Q5b) I shop online because of the competitive prices (M=4.46) and Q5a) I can usually find better prices and promotions when shopping online (M=4.38) highly and above the overall mean of the five factors to indicate the highly attractive prices as important reasons for their choosing to shop online. Also scoring >4.0 were the variables relating to the wider selection of products (M=4.11); relevance and clear product information (M=4.29); and ability to find detailed product information available online (M=4.04).

The two variables relating to promotions had lower means than the overall mean of the five factors (M=4.03). They were Q5c) Promotions (e.g. sales, vouchers, gifts, etc.) are attractive to me (M=3.60) and Q5d) I shop online because of the better promotions and discounts (M=3.36). Although the respondents have suggested that they were attracted to online shopping due to the price advantage, they were not as keen on the promotional aspects which may imply they were more interested in the regularly low prices associated with online shopping rather than the promotional periods of seasonal sales.

With two items scoring over 3.0 and the five other variables scoring over 4.0, the score for the product factor construct is 4.03 (SD=.512). This is on a par with the overall mean score of the five factors (M=4.03), indicating that the consumers considered the importance of the various aspects of the product factor in their decision to purchase.

#### *4.3.4.5 Merchant Factor*

The merchant factor construct consists of nine items. They have been tested for their internal consistency based on the standard reliability assessment of measuring the Cronbach's Alpha. As shown in Table 4.3, the Cronbach's Alpha value for the convenience construct is 0.831, indicating a highly reliable internal consistency of the items.

The merchant factor comprises of nine independent variables including: Q6a) The performance of the website meets my expectations; Q6b) The website is easy to use; Q6c) The website has a wide range of functionalities that enhance my shopping experience; Q6d) A help section is useful to address most of my shopping questions; Q6e) They are responsive to my questions and/or problems; Q6f) They keep me informed of the order status; Q6g) They deliver items within the time promised; Q6h) They have good after-sales service; and Q6i) The store's reputation is important. Table 4.8 presents the descriptive summary of the mean scores of each of the variables along with the mean score of the merchant factor.

The responses for the variables of this construct were collected using a five point Likert scale (1= Disagree Strongly and 5= Agree Strongly). The mean score of over 3.0 would indicate the respondent's agreement with the particular item.

**Merchant Factor Statistics**

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Q6e) They are responsive to my questions and/or problems.	983	4.23	0.026	0.804
Q6b) The website is easy to use.	979	4.21	0.023	0.729
Q6a) The performance of the website meets my expectations.	982	3.86	0.028	0.889
Q6d) A help section is useful to address most of my shopping questions.	982	3.76	0.033	1.029
Q6c) The website has a wide range of functionalities that enhance my shopping experience.	973	3.54	0.033	1.032
Q6e) They are responsive to my questions and/or problems.	983	4.23	0.026	0.804
Q6b) The website is easy to use.	979	4.21	0.023	0.729
Q6a) The performance of the website meets my expectations.	982	3.86	0.028	0.889
Q6d) A help section is useful to address most of my shopping questions.	982	3.76	0.033	1.029
Factor Mean Score	956	4.06	.018	.566

Table 4.8. Merchant Factor Mean Scores

Of the nine variables in the merchant construct, five variables scored >4.0 and four variables scored >3.0. The variable rated the highest mean score in the

merchant construct is Q6g) They deliver items within time promised (M=4.54). This suggests that online shoppers feel that it is important for on time delivery and it could be useful if there are different choices of delivery method to satisfy their needs. Customer services aspects, including Q6f) They keep me informed of the order status" (M=4.24); Q6e) They are responsive to my questions and/or problems (M=4.23); and Q6h) They have good after-sales service (M=4.18), are scored >4.0 which indicates the consumers' high expectation of the level of customer service the retailer provides. The 'reputation of the store' is also deemed important (M=3.96) although it scores slightly less than the overall five factors' mean score (M=4.02). Lastly, the results show that the consumers are in agreement with the importance of the website design as indicated by the >3.0 scores. Apart from Q6b) The website is easy to use" (M=4.21), they are not overly concerned with the other functions of the website as suggested by: Q6a) The performance of the website meets my expectations" (M=3.86); A help section is useful to address most of my shopping questions (M=3.76); and Q6c) The website has a wide range of functionalities that enhance my shopping experience (M=3.54). This suggests that although it is important to have a functional website which is easy to navigate, it may not be the in the best interest of the websites to over complicate their website design.

The mean score for the merchant factor construct is 4.06 (SD=.566), which is in line with the overall mean of the five factors (M=4.03). This represents a high level of agreement according to the respondents that the various aspects within the merchant factor are influential to their decision to purchase over the Internet.

#### *4.3.4.6 Comparing the Factor Mean Scores*

The previous section discussed the items within each of the factor constructs. The next step of the analysis is to examine the mean scores of the constructs

comprising of their respective items. The findings of the five factor constructs are presented along with the overall mean scores and standard deviation values in Table 4.9.

Overall Mean Statistics					
Rank		N	Mean		Std. Deviation
		Statistic	Statistic	Std. Error	Statistic
1 <sup>st</sup>	Convenience Mean Score	959	4.28	.0196	.606
2 <sup>nd</sup>	Merchant Mean Score	956	4.06	.0183	.566
3 <sup>rd</sup>	Product Mean Score	950	4.03	.0166	.512
4 <sup>th</sup>	Social Mean Score	958	3.91	.0182	.562
5 <sup>th</sup>	Risk Mean Score	951	3.84	.0210	.647
	Overall Mean of the 5 Factors	870	4.03	.0132	.389

Table 4.9. Overall Mean of the 5 Factors

The overall mean score of the five factors was  $M=4.03$  ( $SD=.389$ ). Convenience ( $M=4.28$ ,  $SD=.606$ ) had the highest mean score amongst all the factors, followed by merchant ( $M=4.06$ ,  $SD=.566$ ) and product ( $M=4.03$ ,  $SD=.512$ ). Each of the factors scored above or equal to the overall mean score suggesting that the online consumers regard these as important antecedents to their decision to purchase online. Scoring slightly below the overall average factor score are the third and fourth factors, social ( $M=3.91$ ) and risk ( $M=3.84$ ). Notably, all the variables are rated  $>3.0$  and thus, each of the constructs' mean score of  $>3.0$  represents the online consumers' agreement of the factors that are perceived as important to influencing their decision to purchase online.

From analysing the means of the constructs and their items, it can be stated that the online consumers are affected by these five factors.

#### *4.3.4.7 Discussion of Factor Mean Scores*

After analysing the data collected from the online survey (n=983), it was found that all the mean scores of convenience, social, risk, product, and merchant factors all score >3.0, it can be inferred online consumers' agreement that these factors are perceived as important in influencing their decision to purchase online. Thus, it confirms the results from the analysis of the literature and the semi-structured interviews that these factors can influence the online shoppers.

The mean scores of the factors were ranked against each other to determine the consumers' perception of the level to which the factors influence their decision to purchase online. The highest scoring factor was the convenience factor. This construct consisted of five items and received a mean score of  $M=4.28$ ,  $SD=.606$ . Second, was the merchant factor which consisted of nine items and had a mean score of  $M=4.06$ ,  $SD=.566$ . The product factor was third highest scoring. It had seven items and averaged  $M=4.03$ ,  $SD=.512$ . The fourth highest scoring was the social factor construct which consisted of six items with a mean score of  $M=3.91$ ,  $SD=.562$ . Lastly, the risk factor had a mean score of  $M=3.84$ ,  $SD=.647$  and consisted of six items.

Overall, the online consumers have different perceptions of the five factors. The convenience factor was the most influential factor to the consumers' decision to purchase online, indicating this factor can lead to increased purchase. The five items within this factor all scored over 4.0 which is testament on how convenient and easy it is to shop online and hence, it is ranked as the primary reason for the commitment of online shoppers. This finding is consistent with the result found in Wolfinbarger and Gilly's (2001) study where convenience was also the principal perceive benefit.



This was then followed by the merchant, product, social, and lastly risk factors. Generally, risk is perceived to be negatively associated with online shopping. In this case of this study, it was ranked the lowest score amongst the factors which can be inferred that consumers are less concerned about risk and more concern with other factors associate with online shopping. It must be noted, however, if consumer's perception of risk rise, they are less like to make a purchase as indicated in the correlation results in Chapter 4.3.5.4. This is result is consistent with the findings of Jarvenpaa and Todd (1997) where they found that although risk is an important antecedent, it plays a relatively minor role in shoppers' adoption of online shopping.

Although the analysis of the means and ranking of the factors are a good indication of what is perceived as important for the online shoppers, further examination of the data would be needed to explore the relationships between the variables and groups associated with the five factors.

#### **4.3.5 Relationships between the Factors and Online Purchase**

Correlation was used to examine the strength and direction of the relationship between the independent variables (convenience, social, risk, product, and merchant factors) and the dependent variable, online purchase.

##### ***4.3.5.1 Correlation between the Five Factors***

Correlation is a statistical technique capable of measuring the strength and direction of the relationship between two variables. The Pearson correlation will measure the range from -1 to +1 to represent the strength and direction of the

relationship. A Pearson  $r$  correlation coefficient that is between -0.3 to -0.1 or 0.1 to 0.3 is considered weak; -0.5 to -0.3 or 0.3 to 0.5 is considered moderate; and -1.0 to -0.5 or 1.0 to 0.5 is considered strong.

Significance is indicated with a double asterisk mark for significance less than 0.1 and a single asterisk mark for significance less than 0.5. The  $r$  value (Pearson  $r$  correlation) and significance are presented in Table 4.10.

		Correlations				
		Convenience Factor	Social Factor	Risk Factor	Product Factor	Merchant Factor
Convenience Factor	Pearson Correlation	1	.567**	-.020	.584**	.343**
	Sig. (2-tailed)		.000	.533	.000	.000
	N	959	938	931	931	936
Social Factor	Pearson Correlation	.567**	1	.083*	.583**	.396**
	Sig. (2-tailed)	.000		.011	.000	.000
	N	938	958	931	931	936
Risk Factor	Pearson Correlation	-.020	.083*	1	.093**	.193
	Sig. (2-tailed)	.533	.011		.005	.057
	N	931	931	951	924	929
Product Factor	Pearson Correlation	.584**	.583**	.093**	1	.528**
	Sig. (2-tailed)	.000	.000	.005		.000
	N	931	931	924	950	927
Merchant Factor	Pearson Correlation	.343**	.396**	.193	.528**	1
	Sig. (2-tailed)	.000	.000	.057	.000	
	N	936	936	929	927	956

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 4.10. Correlation between the Five Factors**

Drawing from the correlation analysis in Table 4.10, there are a few correlations ranging from strong to weak strengths with statistical significance.

- There is significant strong positive relationship between convenience and social factors ( $r=.567$ ,  $p \leq .01$ ).
- There is significant strong positive relationship between convenience and product factors ( $r=.584$ ,  $p \leq .01$ ).

- There is significant strong positive relationship between social and product factors ( $r=.583$ ,  $p\leq .01$ ).
- There is significant moderate positive relationship between convenience and merchant factors ( $r=.343$ ,  $p\leq .01$ ).
- There is significant moderate positive relationship between social and merchant factors ( $r=.396$ ,  $p\leq .01$ ).
- There is significant strong positive relationship between product and merchant factors ( $r=.528$ ,  $p\leq .01$ ).

The examination of the correlation between the factors has revealed some notable relationships between the factors. Moreover, since each of the factors is in some way correlated with another factor, it can be suggested that the factors do not only influence the online shoppers' decision to purchase; the change in the perception of one factor can also affect the perception of another factor.

#### 4.3.5.2 Discussion of Relationship between Factors

Correlation was conducted between each of the five factors to determine if there are any further significant findings of relationships between the factors. The analysis in Table 4.11 showed a significant relationship between the factors, ranging from moderate to strong strengths.

Factors	Correlations	Relationship
convenience and social	$r=.567$ , $p\leq .01$	strong
convenience and product	$r=.584$ , $p\leq .01$	strong
social and product	$r=.583$ , $p\leq .01$	strong
product and merchant	$r=.528$ , $p\leq .01$	strong
social and merchant	$r=.396$ , $p\leq .01$	moderate
convenience and merchant	$r=.343$ , $p\leq .01$	moderate

Table 4.11. Summary of Correlation between Five Factors

The examination of the relationships between the factors has found significant relationships in a few cases.

Positive relationships were found between convenience and the factors; product ( $r=.584$ ,  $p \leq .01$ ) and social ( $r=.567$ ,  $p \leq .01$ ). This is in line with a previous study conducted by Chanaka and Len (2009) where they found shoppers that value convenience can obtain the benefit of products with less effort and money spent which cause the shopper's social factor value to increase as a result due to the excitement involved. Similarly, social was found to have a positive relationship to product ( $r=.583$ ,  $p \leq .01$ ). The positive relationships show that as the perception of the value of one factor increases, the likelihood of another factor would increase as well.

Additionally, merchant factor was found to have a positive relationship between the factors: product ( $r=.528$ ,  $p \leq .01$ ); social ( $r=.396$ ,  $p \leq .01$ ); convenience ( $r=.343$ ,  $p \leq .01$ ). It should be noted that the merchant factor was not directly correlated with the online purchase measure. This suggests that although the merchant factor does not have a direct influence on online purchase variable, it still affects the other influencing factors that do have significant direct relationships with online purchase. Hence, it can be said the consumers' change in perception of one factor can also affect the perception of another factor which can still ultimately affect the final outcome of whether they purchase or not. The finding between product and social factor is consistent with Korgaonkar, Silverblatt, and Girard's (2006) study where the researchers found that when product categories are more accessible (referring to merchant's characteristics) in obtaining product information, it would lead to higher likelihood of shopping online. Also, Koufaris, Kambil and LaBarbera (2001) concluded that enjoyment associated with product search functions of the website design can be important in influencing new online consumers to return to an online store.

#### 4.3.5.3 Correlation between Online Purchase and the Five Factors

Further to conducting correlation between the five factors, it is also suitable to analyse the correlation between each of the five factor variables and the online purchase. Any significance is indicated with a double asterisk mark for significance less than 0.1 and a single asterisk mark for significance less than 0.5. The r value (Pearson r correlation) and significance are presented in Table 4.12.

		Correlations					
		Online Purchase	Convenience Factor	Social Factor	Risk Factor	Product Factor	Merchant Factor
Online Purchase	Pearson Correlation	1	.261**	.190**	-.179**	.271**	.028
	Sig. (2-tailed)		.000	.000	.000	.000	.392
	N	983	959	958	951	950	956

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Table 4.12. Correlations between Factors and Online Purchase

From evaluating the r coefficients in Table 4.12, it can be observed that there are correlations between the five factors and online purchase that have statistical significance at the .01 level:

- There is significant positive relationship between convenience and online purchase ( $r=.261$ ,  $p\leq .01$ ).
- There is significant positive relationship between social and online purchase ( $r=.190$ ,  $p\leq .01$ ).
- There is significant positive relationship between product and online purchase ( $r=.271$ ,  $p\leq .01$ ).
- There is significant negative relationship between risk and online purchase ( $r=-.179$ ,  $p\leq .01$ ).

Convenience, social, and product factors have positive correlations with the online purchase measure. Hence, it can be said that as the perception for one of these factors increases, the likelihood of online purchase would increase as well. Conversely, the relationship between risk and online purchase is a negative correlation, so the change would occur in the opposite direction. Hence, as the awareness of risk arises, it would likely be accompanied by a less likelihood of online purchase.

#### *4.3.5.4 Discussion of Relationship between Factors and Online Purchase*

The next step of the analysis was then to examine the data further by exploring the relationship between the factors (convenience, social, risk, product, and merchant) and their influence between themselves and on the purchasing behaviour of online consumers. In order to achieve this, correlation was used to examine the strength and direction of the relationship between the independent variables and the dependent variable on online purchase.

Statistical significance was found for the relationship between the following four factors and online purchase (Table 4.13).



Factors	Correlations
product and online purchase	$r=.271, p\leq .01$
convenience and online purchase	$r=.261, p\leq .01$
social and online purchase	$r=.190, p\leq .01$
risk and online purchase	$r=-.179, p\leq .01$

Table 4.13. Summary of Correlation between Factors and Online Purchase

The correlation analysis suggests a positive relationship between online purchase and the factors: product ( $r=.271, p\leq .01$ ); convenience ( $r=.261, p\leq .01$ ); and social ( $r=.190, p\leq .01$ ). This shows that as the perception of the value of convenience, social, and product factors rises, the likelihood of online purchase would increase as well.

The finding that product factor has a positive relationship with online purchase is supported by authors such as Brynjolfsson and Smith (2000) and Jayawardhena, Wright, and Dennis (2007). Also, Delafrouz, Paim, and Khatibi (2010) suggest that convenience and price are a number of factors that influence the online consumers. Childers et al (2001) also found if the online consumer enjoy their shopping experience, they are more likely to do purchases online more often.

Additionally, Forsythe et al. (2006) discovered that convenience, ease of shopping, and product selection account for more variance explained than hedonic motivations. This is similar to the result in this current study where convenience ( $r=.261$ ) and product ( $r=.271$ ) are shown to have a stronger significant correlation with online purchase than the social factor ( $r=.190$ ). Also, the results are consistent with other studies that found price as a significant factor to online purchase (Choi and Park, 2006; Constantinides, 2004). Convenience has also been found as significant motivation for online purchase

intent (Doolin et al., 2005; Shaw et al, 2006; Sorce et al. 2005). On the other hand, the findings in this study found the opposite to the research conducted by Kolsaker et al. (2004) in which the researchers found perceived risk to have a stronger correlation with willingness to shop online than convenience.

On the other hand, the correlation analysis shows a negative relationship between risk and online purchase ( $r = -.179$ ,  $p \leq .01$ ). This suggests that as consumers' awareness of risk increases, it is less likely for the consumer to commit to an online purchase. This is consistent with the findings of the studies by Forsythe and Shi (2003) and Liu and Wei (2003).

#### **4.3.6 Demographical Influences on the Factors and Online Purchase**

After the range of analysis in the earlier parts of the chapter, it can be acknowledged that firstly, consumers agree that the five factors are important influences on their online purchases; secondly, there are relationships between each factor; and thirdly that there are relationships between the factors and the online purchase measure.

As suggested in previous literature, demographical characteristics may also have an effect on a consumer's decision to purchase online. Therefore, a range of analyses was conducted relating to the demographical statistics of the respondents in comparison to the dependent variable and also with the five factors. The tests and their significant differences are reported according to their specific demographical characteristics.

Mainly, T-test can be used to explore the differences between groups and hence its suitability to analyse the demographical characteristics' impact on online purchase. The result is deemed significant for this study if the p value of

the 2-tailed t-test is less than 0.01 which would mean that there is a significant difference in the mean scores between the two groups.

#### 4.3.6.1 Gender

Independent-samples t-test was conducted to compare online purchase and the influence of the five factors between genders. The results of the analysis are presented in Table 4.14.

Group Statistics					
Gender		N	Mean	Std. Deviation	Std. Error Mean
Online Purchase	Male	450	3.00	1.398	.066
	Female	516	3.16	1.682	.074
Convenience Factor	Male	438	4.30	.628	.030
	Female	504	4.27	.574	.026
Social Factor	Male	438	3.88	.578	.028
	Female	503	3.93	.540	.024
Risk Factor	Male	436	3.75	.664	.032
	Female	499	3.92	.616	.028
Product Factor	Male	435	3.98	.504	.024
	Female	500	4.08	.503	.023
Merchant Factor	Male	432	4.00	.605	.029
	Female	508	4.12	.517	.023

Table 4.14. Examination of the Relationship between Gender, Online Purchase, and Factors

After examining the data in relation to gender, no significant difference was found between online purchase and gender. Significant difference was found when gender was examined against each of the five factors:

- For the comparison between risk factor and gender, there was a significant difference in the scores for male ( $M=3.75$ ,  $SD=.664$ ) and female ( $M=3.92$ ,  $SD=.616$ ) conditions;  $t(933)=-4.07$ ,  $p\leq.01$ .
- For the comparison between product factor and gender, there was a significant difference in the scores for male ( $M=3.00$ ,  $SD=1.398$ ) and female ( $M=3.16$ ,  $SD=1.682$ ) conditions;  $t(933)=-3.00$ ,  $p\leq.01$ .
- For the comparison between merchant factor and gender, there was a significant difference in the scores for male ( $M=3.98$ ,  $SD=.504$ ) and female ( $M=4.08$ ,  $SD=.503$ ) conditions;  $t(825)=-3.24$ ,  $p\leq.01$ .

The results show the statistical significance between gender and the three factors: risk, product, and merchant.

#### 4.3.6.2 Marital Status

There was no statistical significance between marital status, online purchase, and the five factors as displayed in Table 4.15.

Group Statistics					
Marital Status		N	Mean	Std. Deviation	Std. Error Mean
Online Purchase	Not married	611	3.04	1.580	.064
	Married	361	3.17	1.532	.081
Convenience Factor	Not married	595	4.26	.616	.025
	Married	354	4.33	.577	.031
Social Factor	Not married	594	3.91	.582	.024
	Married	354	3.90	.522	.028
Risk Factor	Not married	595	3.85	.655	.027
	Married	346	3.82	.638	.034
Product Factor	Not married	587	4.03	.499	.021
	Married	354	4.04	.528	.028
Merchant Factor	Not married	596	4.04	.593	.024
	Married	350	4.09	.516	.028

Table 4.15. Examination of the Relationship between Marital Status, Online Purchase, and Factors

#### 4.3.6.3 Age

Independent-samples t-test was conducted to compare the frequency of online purchase and the influence of the five factors with age. Age has been categorised into 'under 35 years old' and '35 years and older' to perform this analysis. The result of the analysis is presented in Table 4.16.

Group Statistics					
Age		N	Mean	Std. Deviation	Std. Error Mean
Online Purchase	Under 35	556	3.04	1.525	.065
	35 and older	424	3.14	1.614	.078
Convenience Factor	Under 35	541	4.32	.571	.025
	35 and older	415	4.23	.647	.032
Social Factor	Under 35	540	3.98	.547	.024
	35 and older	415	3.81	.569	.028
Risk Factor	Under 35	539	3.88	.639	.028
	35 and older	409	3.78	.655	.032
Product Factor	Under 35	538	4.08	.485	.021
	35 and older	411	3.97	.542	.027
Merchant Factor	Under 35	538	4.07	.590	.025
	35 and older	415	4.04	.532	.026

Table 4.16. Examination of the Relationship between Age, Online Purchase, and Factors

After examining the data in relation to age, no significant difference was found between online purchase and age. Significant difference was found when age was examined against each of the five factors:

- For the comparison between social factor and age, there was a significant difference in the scores for 'under 35 years old' ( $M=3.98$ ,  $SD=.547$ ) and '35 years and older' ( $M=3.81$ ,  $SD=.569$ ) conditions;  $t(953)=4.60$ ,  $p\leq.01$ .
- For the comparison between product factor and age, there was a significant difference in the scores for 'under 35 years old' ( $M=4.08$ ,  $SD=.485$ ) and '35 years and older' ( $M=3.97$ ,  $SD=.542$ ) conditions;  $t(826)=3.04$ ,  $p\leq.01$ .

The results show the statistical significance between age and the two factors: social and product.



#### 4.3.6.4 Education

Independent-samples t-test was conducted to compare online purchase and the influence of the five factors with education. Education has been categorised into 'bachelor degree or higher' and 'college degree or lower' to perform this analysis. The result of the analysis is presented in Table 4.17. There was no statistical significance between education, online purchase, and the five factors.

Group Statistics					
Education		N	Mean	Std. Deviation	Std. Error Mean
Online Purchase	Bachelor degree or higher	552	3.13	1.575	.067
	College degree or lower	394	3.04	1.542	.078
Convenience Factor	Bachelor degree or higher	539	4.30	.603	.026
	College degree or lower	383	4.27	.582	.030
Social Factor	Bachelor degree or higher	540	3.88	.541	.023
	College degree or lower	384	3.97	.557	.028
Risk Factor	Bachelor degree or higher	529	3.84	.655	.028
	College degree or lower	387	3.84	.620	.032
Product Factor	Bachelor degree or higher	536	4.03	.488	.021
	College degree or lower	378	4.04	.516	.027
Merchant Factor	Bachelor degree or higher	536	4.07	.538	.023
	College degree or lower	384	4.05	.563	.029

Table 4.17. Examination of the Relationship between Education, Online Purchase, and Factors

#### 4.3.6.5 Income

Independent-samples t-test was conducted to compare the frequency of online purchase and the influence of the five factors with income. Income has been categorised into 'under £30,000' and 'over £30,000' to perform this analysis. The result of the analysis is presented in Table 4.18.

Group Statistics					
Income		N	Mean	Std. Deviation	Std. Error Mean
Online Purchase	Under £30,000	374	3.18	1.638	.085
	Over £30,000	168	3.13	1.485	.115
Convenience Factor	Under £30,000	365	4.29	.641	.034
	Over £30,000	163	4.32	.543	.043
Social Factor	Under £30,000	360	3.97	.578	.030
	Over £30,000	164	3.79	.465	.036
Risk Factor	Under £30,000	364	3.86	.661	.035
	Over £30,000	162	3.71	.598	.047
Product Factor	Under £30,000	361	4.06	.532	.028
	Over £30,000	166	3.99	.505	.039
Merchant Factor	Under £30,000	361	4.06	.577	.030
	Over £30,000	165	4.01	.515	.040

Table 4.18. Examination of the Relationship between Income, Online Purchase, and Factors

No significant difference was found between online purchase and income but when income was examined against the five factors, a significant difference was found:

- For the comparison between social factor and income, there was a significant difference in the scores for 'under £30,000' (M=3.97, SD=.578) and 'over £30,000' (M=3.79, SD=.465) conditions;  $t(386)=3.77$ ,  $p \leq .01$ .

The results show the statistical significance between social factor and income factors.

#### 4.3.6.6 Internet Usage

Independent-samples t-test was conducted to compare the frequency of online purchase and the influence of the five factors with online frequency. Online frequency has been categorised into 'less than 20 hours' and 'more than 20 hours' to perform this analysis. The results of the analysis are presented in Table 4.19.

Group Statistics					
Online Frequency		N	Mean	Std. Deviation	Std. Error Mean
Online Purchase	Less than 20 hours	543	2.88	1.539	.066
	More than 20 hours	440	3.33	1.563	.075
Convenience Factor	Less than 20 hours	527	4.25	.584	.025
	More than 20 hours	432	4.32	.630	.030
Social Factor	Less than 20 hours	530	3.86	.555	.024
	More than 20 hours	428	3.96	.567	.027
Risk Factor	Less than 20 hours	530	3.86	.658	.029
	More than 20 hours	421	3.81	.632	.031
Product Factor	Less than 20 hours	528	3.99	.521	.023
	More than 20 hours	422	4.08	.497	.024
Merchant Factor	Less than 20 hours	532	4.07	.549	.024
	More than 20 hours	424	4.04	.588	.029

Table 4.19. Examination of the Relationship between Online Frequency, Online Purchase, and Factors

Online purchase and online frequency was found to have a significant difference in the scores for 'less than 20 hours' (M=2.88, SD=1.539) and 'more than 20 hours' (M=3.33, SD=1.563) conditions;  $t(981)=-4.45$ ,  $p \leq .01$ .

Furthermore, a significant difference was found when online frequency was examined against each of the five factors:

- For the comparison between social factor and online frequency, there was a significant difference in the scores for 'less than 20 hours' ( $M=3.86$ ,  $SD=.555$ ) and 'more than 20 hours' ( $M=3.96$ ,  $SD=.567$ ) conditions;  $t(956)=-2.74$ ,  $p\leq.01$ .
- For the comparison between product factor and online frequency, there was a significant difference in the scores for 'less than 20 hours' ( $M=3.99$ ,  $SD=.521$ ) and 'more than 20 hours' ( $M=4.08$ ,  $SD=.497$ ) conditions;  $t(948)=-2.69$ ,  $p\leq.01$ .

The results show the statistical significance between online frequency and online purchase. Additionally, significance was found between online frequency and the two factors: social and product.

#### *4.3.6.7 Discussion of Findings between Demographics, Factors, and Online Purchase*

The review of the literature suggests mixed results between demographic characteristics and their effect on online shopping. As such, this study conducted statistical analyses to determine whether there is any statistical significance between demographic characteristics of the online consumers, their purchasing behaviour and the influencing factors. The results found that there were various demographic characteristics which significantly affected the factors itself but only internet usage had significant effect on online purchase.

Firstly, there were significant differences between genders in their perception of product [ $t(933)=-3.00$ ,  $p\leq.01$ ], and merchant [ $t(825)=-3.24$ ,  $p\leq.01$ ], and risk

[ $t(933)=-4.07$ ,  $p\leq.01$ ] factors with females scoring higher perception on these factors. Although there is generally a mixed results in demographics, a few studies in the past have reported the males make more purchases than females (Brown, Pope and Voges, 2003; Rodgers and Harris, 2003). Although there is no statistical significance between the two genders in this study, females purchased more often than males. This is consistent with the findings by Burke (2002) and Li, Kuo and Russell (1999) where they also found the same. This may be indication females are becoming more receptive of online shopping and its benefits. Additionally, Shim's (1996) finding indicate there was significant difference in perceived product on shopping motivation with males more likely being motivated by the price. Meanwhile, this study found females to be more likely motivated by the product factor than men.

Younger shoppers (under 35 years old) were also found to have significant differences in their higher perception of social [ $t(953)=4.60$ ,  $p\leq.01$ ] and product [ $t(826)=3.04$ ,  $p\leq.01$ ] factors when compared to the older shoppers (35 years and older). This can be related to Dholakia and Uusitalo's (2002) findings where they found younger consumers to value more benefits than the older consumers. Dillon and Reif (2004) also found pricing to be the more influential factor amongst their sample of students. As for income, those who earn less than £30,000 are significantly more likely to consider the social factor [ $t(386)=3.77$ ,  $p\leq.01$ ]. These results indicate the various demographic characteristics' effect on various factors but none were found to have statistical significant influence on the online purchase directly. On the other hand, there were no significant differences between the differences in marital status or education and the consumers' perception of the factors and the effect on their frequency to purchase.

The results also indicate that consumers' internet usage experience was found to have a significant difference between online purchase and those that spend more than 20 or more hours on the Internet [ $t(981)=-4.45$ ,  $p\leq.01$ ]. Additionally,

Internet usage was found to have an effect on the consumers' frequency of purchase and also considered social [ $t(956)=-2.74$ ,  $p\leq.01$ ] and product [ $t(948)=-2.69$ ,  $p\leq.01$ ] factors as motivation to shop online. Hence, it can be said that consumers' internet usage has a significant impact on their perception of social and product factors and ultimately influences their frequency of online purchase. This finding for internet usage supports previous study which found those that spend more time online shop more often (Gefen, Karahanna, and Straub, 2003; Hoffman, Novak, and Peralta, 1998). Kuhlmeier and Knight (2005) also indicated internet usage as one of the important antecedents to consumers' online purchases. Ratchford, Talukdar, and Lee (2001) believe it can be explained by the fact that as a consumer spend more time on the Internet, the amount of knowledge and skills of using the system increase. Once they achieve the required level of knowledge and skills and become more familiar with it, they are more inclined and receptive to shopping on the Internet.

#### **4.3.7 Perceptions of the Factors from Three Types of Online Shoppers (Casual, Regular, and Frequent)**

The analyses conducted thus far have provided supporting evidence of each of the five factors' effect on the online shoppers. To further analyse this effect, it would be useful to categorise the consumers into different types of online shoppers to investigate whether there are any differences in terms of how each group of shoppers perceive the five factors.

The analysis used to conduct this was the one-way analysis of variance (ANOVA). It is capable of analysing the difference between more than two groups. The online shoppers were categorised into three groups (casual, regular, and frequent online shoppers) based on their frequency of purchase. An analysis on three types of online purchasers was investigated to find any differences in terms of the three groups' perceptions on the various factors. The

results are examined based on the level to which each of the three groups of online shoppers perceived their agreement or disagreement of the influence of the five factors that may affect their decision to purchase online.

#### *4.3.7.1 The Casual Purchaser (Purchased less than 10 online items or services in the last 12 months)*

Casual purchaser is defined as those that have purchased less than 10 items or services online in the past year. Their level of agreement to how they perceive each factor was measured by the mean score which was then ranked and presented from highest to lowest in Table 4.20.

Rank	Factor	Casual Online Purchaser	Std. Deviation
1st	Convenience Factor	4.12	.628
2nd	Merchant Factor	4.03	.585
3rd	Risk Factor	3.94	.659
4th	Product Factor	3.90	.540
5th	Social Factor	3.80	.586

Table 4.20. Casual Online Purchasers' Perception of the Five Factors

The results indicate that the casual online buyers perceived the convenience factor as the most influencing factor ( $M=4.12$ ,  $SD=.628$ ). This was followed by the merchant factor ( $M=4.03$ ,  $SD=.585$ ); the risk factor ( $M=3.94$ ,  $SD=.659$ ); the product factor ( $M=3.90$ ,  $SD=.540$ ); and the social factor ( $M=3.80$ ,  $SD=.586$ ).

#### *4.3.7.2 The Regular Purchaser (Purchased 11-30 online items or services in the last 12 months)*



Regular purchaser is defined as those that have purchased between 10-30 items or services in the past year. Their level of agreement to how they perceive each factor was measured by the mean score which was then ranked and presented from highest to lowest in Table 4.21.

Rank	Factor	Regular Online Purchaser	Std. Deviation
1st	Convenience Factor	4.33	.581
2nd	Merchant Factor	4.08	.491
3rd	Product Factor	4.05	.452
4th	Social Factor	3.94	.532
5th	Risk Factor	3.81	.606

Table 4.21. Regular Online Purchasers' Perception of the Five Factors

The results indicate that the regular online buyers perceived the convenience factor as the most influencing factor (M=4.33, SD=.581), followed by the merchant factor (M=4.08, SD=.491); the product factor (M=4.05, SD=.452); the social factor (M=3.94, SD=.532); and the risk factor (M=3.81, SD=.606).

#### *4.3.7.3 The Frequent Purchaser (Purchased more than 30 online items or services in the last 12 months)*

Frequent purchaser is defined as those that have purchased more than 30 items or services in the past year. Their level of agreement to how they perceived each factor was measured by the mean score which was then ranked and presented from highest to lowest in Table 4.22.

Rank	Factor	Frequent Online Purchaser	Std. Deviation
1st	Convenience Factor	4.49	.606
2nd	Product Factor	4.28	.513
3rd	Merchant Factor	4.07	.673
4th	Social Factor	4.06	.527
5th	Risk Factor	3.66	.674

Table 4.22. Frequent Online Purchasers' Perception of the Five Factors

The results indicate that the frequent online buyers perceived the convenience factor as the most influencing factor (M=4.49, SD=.606), followed by the product factor (M=4.28, SD=.513); the merchant factor (M=4.07, SD=.673); the social factor (M=4.06, SD=.527); and the risk factor (M=3.66, SD=.674).

#### 4.3.7.4 Comparison between the Factors and Types of Online Consumers

After examining the data between the factors and the three types of online consumers, there appears to be a significant difference between each type of online consumer across the factors. The results are illustrated in Table 4.23.

	Casual Online Purchaser	Regular Online Purchaser	Frequent Online Purchaser	F	Sig.
Convenience Factor	4.12	4.33	4.49	26.827	.000
Social Factor	3.80	3.94	4.06	15.061	.000
Risk Factor	3.94	3.81	3.66	12.152	.000
Product Factor	3.90	4.05	4.28	35.001	.000
Merchant Factor	4.03	4.08	4.07	.796	.452
Overall Mean Score	3.96	4.05	4.12	10.119	.000

Table 4.23. Comparison of the Factors and 3 types of Online Consumers

As the results indicate, the effects of convenience, social, risk, and product factors differed significantly across the casual, regular, and frequent online purchasers ( $p \leq .001$ ). On the other hand, the merchant factor was not significantly different between the three types of online shoppers.

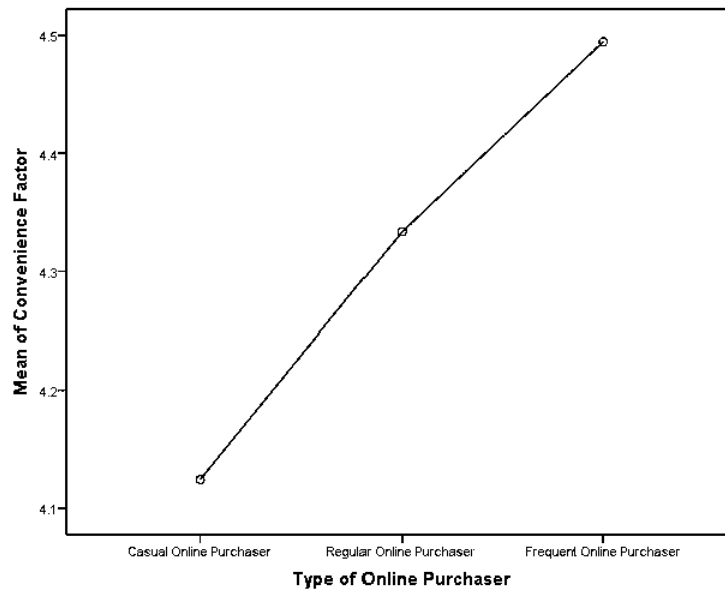


Table 4.24. Comparison of Type of Online Purchaser and Convenience Factor

A one-way analysis between subjects (ANOVA) was conducted to compare the effects of the convenience factor on casual, regular, and frequent purchasers' conditions. There was a significant effect of convenience factor on the type of purchasers at the  $p \leq .001$  level for the three conditions [ $F(2, 951) = 26.83$ ,  $p = .001$ ]. The mean score for the convenience factor was significantly different across the three types of online shoppers: casual ( $M=4.12$ ); regular ( $M=4.33$ ); and frequent ( $M=4.49$ ). These results suggest that the consumers' perception of the convenience factor does have an effect on their frequency of purchase. Specifically, it can be inferred that as the consumers' perception of the value of the convenience factor increases, their frequency of purchases also increases.

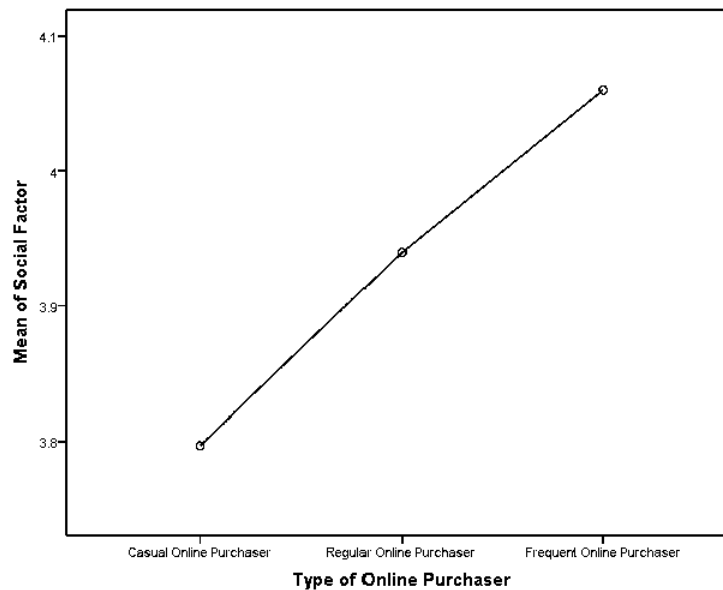


Table 4.25. Comparison of Type of Online Purchaser and Social Factor

The effect of social factor on casual, regular, and frequent purchasers' conditions was also analysed. There was a significant effect of the social factor on the type of purchasers at the  $p \leq .001$  level for the three conditions [ $F(2, 950) = 15.06, p = .001$ ]. The mean score for the social factor was significantly different across the three types of online shoppers: casual ( $M=3.80$ ); regular ( $M=3.94$ ); and frequent ( $M=4.06$ ). These results suggest that the consumers' perception of the social factor have an effect on their frequency of purchase. As the consumers' perception of the value of the social factor increases, their frequency of purchases also increases.



Table 4.26. Comparison of Type of Online Purchaser and Risk Factor

ANOVA was conducted to compare the effects of the risk factor on casual, regular, and frequent purchasers' conditions. There was a significant effect of the risk factor on the type of purchasers at the  $p \leq .001$  level for the three conditions [ $F(2, 943) = 12.15, p = .001$ ]. The mean score for the risk factor was significantly different across the three types of online shoppers: casual ( $M=3.94$ ); regular ( $M=3.81$ ); and frequent ( $M=3.66$ ). These results suggest that the consumers' perception of the risk factor can have an effect on their frequency of purchase and thus, it can be said that as the consumers' perception of the value of the risk factor increases, their frequency of purchases decreases.

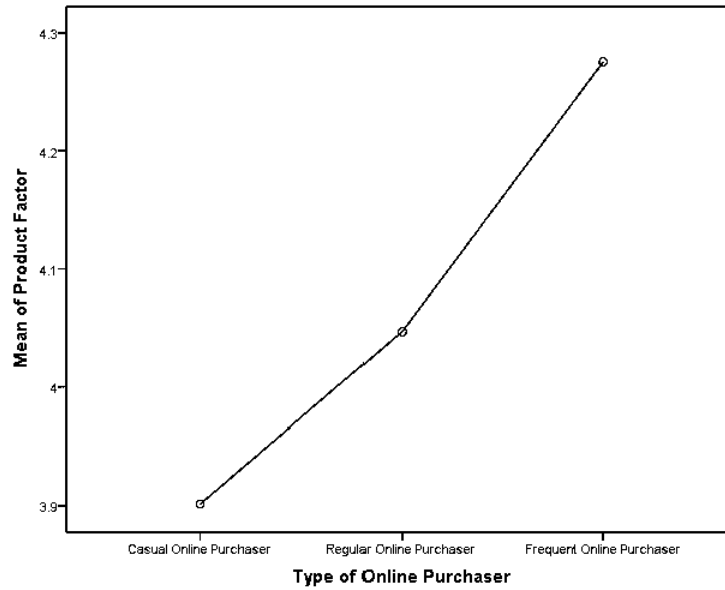


Table 4.27. Comparison of Type of Online Purchaser and Product Factor

A one-way analysis between subjects (ANOVA) was again conducted to compare the effects of the product factor on casual, regular, and frequent purchasers' conditions. There was a significant effect of the risk factor on the type of purchasers at the  $p \leq .001$  level for the three conditions [ $F(2, 942) = 35.00$ ,  $p = .001$ ]. The mean score for the product factor was significantly different across the three types of online shoppers: casual ( $M=3.90$ ); regular ( $M=4.05$ ); and frequent ( $M=4.28$ ). These results suggest that the consumers' perception of the product factor have an effect on their frequency of purchase. Specifically, it can be inferred that as the consumers' perception of the value of the product factor increases, their frequency of purchases also increases.

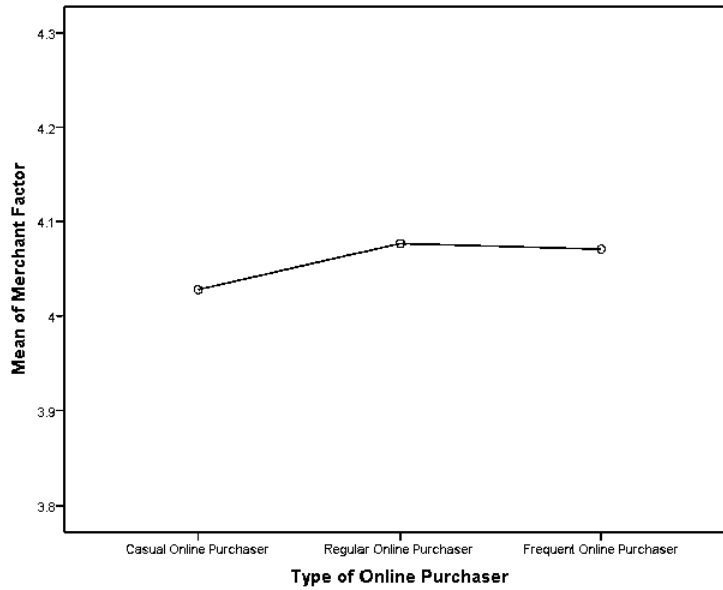


Table 4.28. Comparison of Type of Online Purchaser and Merchant Factor

ANOVA was conducted to compare the effects of the merchant factor on casual, regular, and frequent purchasers' conditions. There was no significant effect of the risk factor on the type of purchasers at the  $p \leq .05$  level for the three conditions [ $F(2, 948) = .796, p = .452$ ]. The mean score for the merchant factor was not significantly different across the three types of online shoppers: casual ( $M=4.03$ ); regular ( $M=4.08$ ); and frequent ( $M=4.07$ ). These results suggest that the consumers' perception of the merchant factor does not have an effect on their frequency of purchase. Specifically, it can be inferred that the consumers' perception of the importance of the merchant factor is consistent with all types of online purchasers.



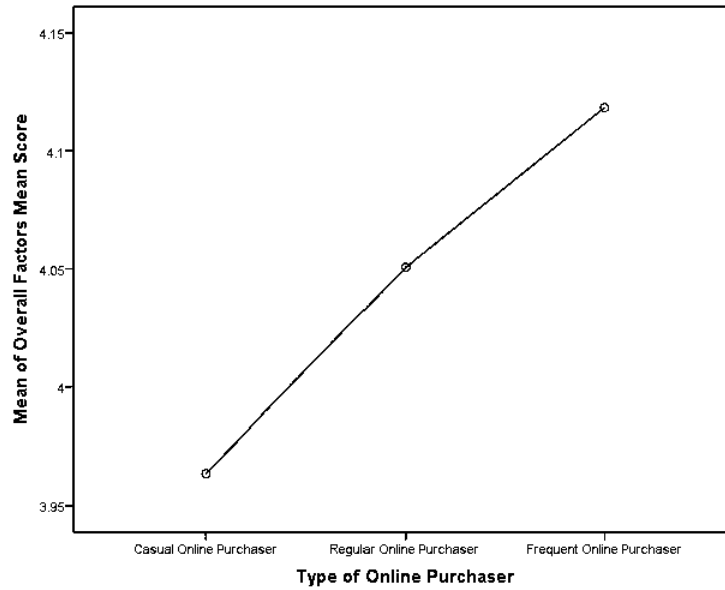


Table 4.29. Comparison of Type of Online Purchaser and Overall Factor Mean Score

Finally, an analysis was conducted to compare the overall mean of the five factors on casual, regular, and frequent purchasers' conditions. There was a significant effect of the overall perception on the type of purchasers at the  $p \leq .001$  level for the three conditions [ $F(2, 942) = 35.00, p = .001$ ]. The overall mean score was significantly different across the three types of online shoppers: casual ( $M=3.96$ ); regular ( $M=4.05$ ); and frequent ( $M=4.12$ ). These results suggest that each type of purchasers' overall perception of the factors influencing online shopping have an effect on their frequency of purchase. It can be inferred that as the consumers' overall perception of online shopping increases, their frequency of purchases also increases.

#### *4.3.7.5 Discussion of Types of Online Shoppers vs Factors and Online Purchase*

The results showed that convenience, social, risk, and product factors were perceived differently among the casual, regular, and frequent online purchasers ( $p \leq .001$ ). On the other hand, the merchant factor was not significantly different between the three types of online shoppers ( $p = .452$ ). These results suggest that the three types of online shoppers perceive the factors differently and indicate that the more often the online shopper purchases online, the more likely they are satisfied with the benefits of convenience, social, and product factors and less worried about risk. Furthermore, it was found that as the consumers increase their purchase frequency, their perception of convenience, social, and product factors would also significantly increase while their perception of risk significantly decreases.

This study found that convenience was recognised as the top ranking factor to all three types of online purchasers, indicating convenience is a top influencing factor to all consumers. The finding is consistent with Donthu and Garcia (1999) where the researchers found that frequent shoppers were convenience seekers compared to infrequent shoppers.

Similarly, the mean score of the product factor was found to increase as the type of purchaser conduct more online purchases. Bhatnagar, Misra and Rao (2000) also found the same in their research as with Dill and Reif (2004) when the researchers conducting their study on students' online purchases.

Conversely, the more frequent the online shopper is, the less likely he/she would be worried about the risks. The mean score for risk indicated that the casual purchasers had the highest mean score for risk factor while the frequent purchasers had the lowest mean score for this factor. This is in line with the study by Donthu and Garcia (1999) in which the researchers found frequent

shoppers being less risk adverse than infrequent shoppers. Similarly, researchers such as Dillon and Reif (2004), Bernard and Makienko (2011), Kuhlmeier and Knight (2005), Liebermann and Stashevsky (2009), and Zviran (2008) found that experienced Internet users that recognise the benefits of online shopping did not consider the risk factor as threatening. also found the same findings. The same result is found in this study, the frequent shoppers gave the lowest score for the risk factor, indicating they too do not consider risk as a deterrant to their online shopping behaviour.

Furthermore, the merchant factor was perceived to be consistently important to the online shoppers since there was little difference in the perception of merchant factor across the three types of purchasers. However, as the analysis indicates, the merchant factor appears to be affected more by the various factors than being affected directly by the online purchase measure. Hence, the consumers' change in perception of one factor is likely to affect their perception on the merchant factor.

Lastly, as the results indicate, the factors' overall perception on the casual, regular, and frequent purchasers increases as the consumers increase their purchase experience. Frequent purchasers have better perception of online shopping when compared to those that have less experience. These findings confirm the results of previous research such as Jarvenpaa and Todd (1997) and Vellido, Lisboa and Meehan (2000). It can be inferred that as the consumers' overall perception increases, the consumers are more willing to make online purchases.

The findings from the qualitative and quantitative phases of this study provide a holistic understanding of the various influences of online shopping. They are supported with empirical evidence through statistical analyses to facilitate in the

development of the Integrated Model of Factors Influencing the Online Consumers.

#### **4.4 INTEGRATED MODEL OF FACTORS INFLUENCING THE ONLINE CONSUMERS**

The findings from this study are constructed into a model to represent the holistic view of the complex online shopping environment. The Integrated Model of the Factors Influencing the Purchasing Decision of UK Online Consumers provides the comprehensive view of online shopping and highlights the various factors that can influence the consumers' perception and ultimately affect their decision to purchase online. Through the use of literature, semi-structured interviews, and online survey, the triangulation analysis of the data provides empirical evidence for the model presented in Figure 4.5. The suggested model contributes theoretically and practically to enhance the understanding of the online consumers.

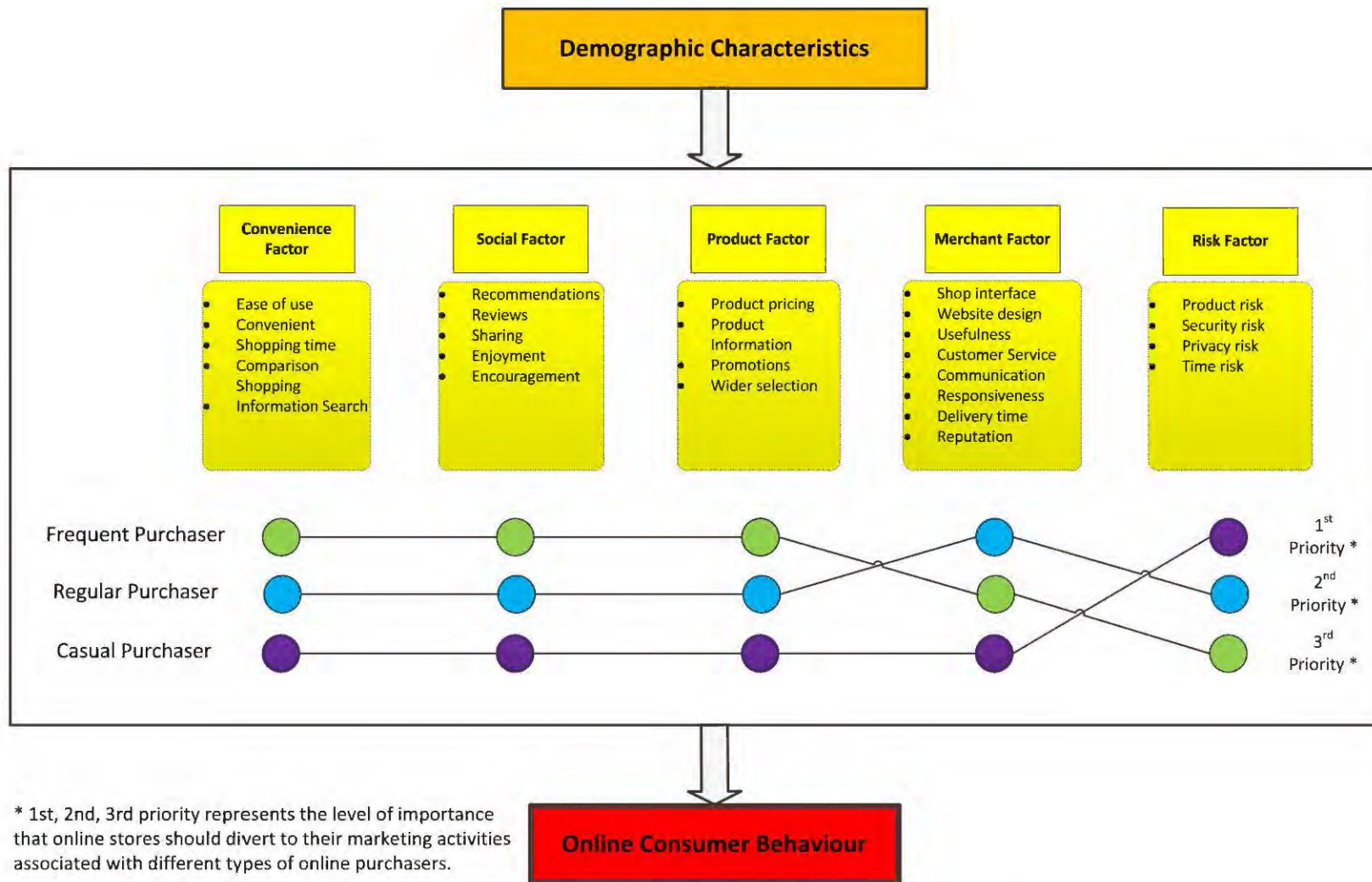


Figure 4.5 The Integrated Model of Factors Influencing the Online Consumers

The findings from this study helped integrate the various variables associated with online shopping into five factors that influence the online shoppers' decision to purchase. These five factors include: convenience, social, risk, product, and merchant factors. Furthermore, demographic characteristics and the different type of online shoppers are found to also have an effect on the consumers and thus also included in this model.

#### **4.4.1 Demographic Characteristics**

The findings found that although demographic characteristics do not have a direct relationship with the online purchase measure, it does have an effect on the other factors. In terms of gender, females were found to be more motivated by product [ $t(933)=-3.00$ ,  $p\leq.01$ ] and merchant [ $t(825)=-3.24$ ,  $p\leq.01$ ] factors and more concern of the risk [ $t(933)=-4.07$ ,  $p\leq.01$ ] when online shopping. In terms of age, younger shoppers (under 35 years old) were found to have higher perception of social [ $t(953)=4.60$ ,  $p\leq.01$ ] and product [ $t(826)=3.04$ ,  $p\leq.01$ ] factors than those that are older. Income was also found to be significantly different between those that earn less than £30,000 or more than £30,000 with the former significantly more likely to be more receptive of the social factor [ $t(386)=3.77$ ,  $p\leq.01$ ]. Additionally, those that spend 20 or more hours online were found to have significant influence on the online shoppers [ $t(981)=-4.45$ ,  $p\leq.01$ ]. They are also more likely to consider social [ $t(956)=-2.74$ ,  $p\leq.01$ ] and product [ $t(948)=-2.69$ ,  $p\leq.01$ ] factors as motivation to shop online. The results in this study found that there were various demographic characteristics which significantly affected the factors itself but only internet usage had significant effect on online purchase.

Previous research has suggested a mixed results in terms of the demographic characteristics' effect on the online purchase measure. There has not been any



indication to show a consensus of how demographic characteristics affect the online consumers. The findings in this study found that the younger shoppers (as indicated by their age and lower income) value the social factor significantly more than those that are older which can be a cue for marketers to introduce more social related variables and lower prices in online stores aimed for the younger demographic. In terms of Internet usage and consistent with previous research, this study found that consumer with more than 20 hours Internet usage each week was found to purchase significantly more than those who spend less time online. Furthermore, this group of internet users are more likely to be motivated by the social and product factors.

All in all, although the consumers' demographic characteristics may not directly effect on the consumers' decision to purchase online and their effect on the factors may vary dependant on the profile of the individual online shopper.

#### **4.4.2 Convenience Factor**

Convenience was found to be the most important factor that affect the online shoppers in this study. It consists of variables including "reducing shopping time", "convenient", "ease of use", "comparison shopping", and "information search". Each of the variables measured scored higher than the overall mean score of the five factors ( $M=4.03$ ), indicating the importance of this factor to the consumers. It also scored the highest mean score amongst all the other factors ( $M=4.28$ ,  $SD=.606$ ). The convenience factor was also found to have direct significant relationship with the online purchase measure ( $r=.261$ ,  $p\leq.01$ ). It was proved to have significant positive relationship with other factors including social ( $r=.567$ ,  $p\leq.01$ ); product ( $r=.584$ ,  $p\leq.01$ ); and merchant ( $r=.343$ ,  $p\leq.01$ ). This indicate as the perception of convenience rises, it would affect other factors including social, product, and merchant and ultimately influence the likelihood of



online purchase. This study found convenience to be the main determinant for shoppers purchasing online and it is found to be consistent with literatures that also support the notion that convenience as one of the principal reason for consumers shopping online including: Burke (2002); Delafrooz et al (2009); Rohm and Swaminathan (2004); and Wolfinbarger and Gilly (2001).

Convenience is also one of the most commonly cited reason for consumers buying online as stated in previous studies including: Chen and Chang (2003); Prasad and Aryasri (2009); Jarvenpaa and Todd (1997). This further illustrates the importance of convenience. The convenience of being able to shop online 24 hours a day and assessable from any virtually any location is greatly valued by the consumers who previously only had the traditional channel to making purchases. According to Jayawardhena and Wright (2008), it would be beneficial for online stores to make it easier for the consumers by offering speedy checkout, speeding up payment systems, and enhancing information use within the website so the consumers can complete their purchasing process more quickly.

In order to improve the convenience for the online consumers, online stores should provide convenience by offer wider range of products and services for the consumers to choose from without the need to visit several other online stores to purchase all of their needs. Wright et al (2006) further explains that Tesco Plc. understood the value of convenience and its importance to the consumers and hence, they have taken advantage online by offering grocery deliveries, home purchases, broadband services, insurance, and etc. By offering so many options for online consumers to buy conveniently, the retailer creates a pleasant atmosphere, improves its competitive positioning and satisfaction, and also induces excitement to the online shopping process (Wright, Newman and Dennis, 2006).

#### **4.4.3 Social Factor**

The social factor was found to be an influencing factor that affects the online shoppers. It consists of variables including “enjoyment”, “recommendations”, “reviews”, “sharing”, and “encouragement”. The mean score for the social factor construct was 3.91 (SD=.562) is slightly lower than the overall mean score of the five factors (M=4.03), it is far above the 3.0 which indicate that the consumers find the various aspects of the social factor to be influential on their decision to purchase online. The social factor has a directly significant relationship with the online purchase measure ( $r=.190$ ,  $p\leq.01$ ). The social factor was proved to also have significant positive relationship with other factors including product ( $r=.583$ ,  $p\leq.01$ ); and merchant ( $r=.396$ ,  $p\leq.01$ ). This indicates as the perception of social rises, it would affect other factors including product and merchant and ultimately influence the likelihood of online purchase. The social factor as one of the factors that can have strong influence on online shoppers have also been stated previous studies (Childres et al, 2001; Jayawardhena and Wright, 2008; Prasad and Aryasri, 2009; Wakefield and Baker, 1998)

Technological improvements have helped online stores become easier to use, more attractive, more functional, and more interactive. The latter is highly important when attracting younger customers as they show more interest in the social factor more than those that are older. They are also keen social networking users that are capable of spreading news quickly through their social network. Product reviews, recommendations, bargains, and etc. are just some of the things that can help an online retailer gain an edge on their competition. One of the marketing strategies that has been implemented by online retailers is to provide incentives for users that “Like” the company’s Facebook page. In return, the company gains publicity within the persons’ network of friends. Essentially, it is a trade-off the younger purchasers that value social and product factors will gladly accept. Other strategies include providing incentives for

writing product reviews and for recommending or sharing product information to the consumers' network of friends and families. The modern networked society provides extended opportunities for companies to develop and maintain relationships with their consumers (Szmigin, Canning and Rappel, 2005).

#### **4.4.4 Risk Factor**

The risk factor was found to be another important influencing factor that affects the online shoppers. It consists of variables including "security", "privacy", "product", and "time" risks. The mean score for risk sits below the overall mean score of ( $M=4.03$ ) but all six variables scored over 3.0 which indicate the consumer's concern and its effect on their decision to purchase online. The mean for the risk factor was 3.84 ( $SD=.647$ ) and it is ranked the lowest importance amongst all five factors which may indicate that consumers are becoming less concerned about risk and more motivated by the other factors associate with online shopping. The risk factor was the only factor that was found to have a direct negative relationship with the online purchase measure. The correlation between risk and online purchase was ( $r=-.179$ ,  $p\leq .01$ ). This indicates as the perception of risk rises, it would negatively affect the likelihood of online purchase. Constantinides (2004), Gefen and Straub (2000), Jarvenpaa, Tractinsky and Vitale (2000), and Kuhlmeier and Knight (2005), have also found perceived risk to be an important antecedent that influence the customers' decision to purchase on the Internet.

Online stores must ensure consumers' financial transactions are secured by using the most updated and sophisticate technologies to encrypt communication. This would help reduce risk of fraud and financial loss for the consumers (Zeithaml, Parasuraman and Malhotra, 2002). Also, McKnight and Chervany (2001) suggested online stores to make the consumers feel more

comfortable when shopping by posting their privacy policy, use third-party security verifications, advertise the stores' good reputation, and provide details on how transaction and personal data are secured (Elliot and Fowell, 2000). Furthermore, the consumers' personal details must be treated privately and confidentially and without misusing of private data for financial gain such as spam. The online consumers cannot touch or feel the products and hence it would be beneficial to the online stores to make use of the assortment of new technological websites development to better showcase their products and services and more detailed product information to reduce the consumers' sense of risk when shopping online. The more experience web shoppers gain, the less likely they would consider risk to be threatening, hence online stores should attempt to attract new consumers by concentrating their efforts on other factors that influence the online shoppers as well. One of them would be to offer attractive prices and promotions for new consumers.

#### **4.4.5 Product Factor**

The product factor is another area of importance according to the online shoppers. It consists of variables including "product pricing", "product information", "promotions", and "wider product selection". The majority of the variable scored  $>4.0$  while the factor mean score was 4.03 (SD=.512). This is on a par with the overall mean score of the five factors ( $M=4.03$ ) which suggests the consumers consider the product factor to be important in their decision to buy online. The product factor has a directly significant relationship with the online purchase measure ( $r=.271$ ,  $p\leq.01$ ). It was proved to have significant positive relationship with other factors including convenience ( $r=.584$ ,  $p\leq.01$ ); social ( $r=.583$ ,  $p\leq.01$ ); and merchant ( $r=.528$ ,  $p\leq.01$ ). This indicate as the perception of product rises, it would affect other factors including convenience, social, and merchant and ultimately influence the likelihood of online purchase.

The importance of the product factor has also been noted in previous studies such as Burke (2002); Delafrooz et al (2009); Rohm and Swaminathan (2004); and Wolfinbarger and Gilly (2001) where the researchers found wider selection to be one of the main reasons for shoppers purchasing online. Ghani et al (2001) also found price to be a major influence for the consumers' decision to purchase on the Internet.

A big advantage for shopping on the Internet is the ability for the consumers to have access to a wider selection of product choices offered by the online stores. Since there is no space limit on the number of products that the online store can display, online retailers should take advantage of this and offer their consumers a wide range and assortments of products as compared to the traditional channels (Delafrooz et al, 2009).

Similarly, online retailers should aim to attract new customers and retain existing ones by offering competitive prices because of the lower operating cost compared to the traditional channels (Delafrooz et al, 2009; Rowley, 2000). Since saving money from cheaper prices is an important attribute to the consumers, the online stores could also consider integrating product and price comparisons as a function of their website to allow the consumers to shop easier and potentially increase their intention to purchase more online.

#### **4.4.6 Merchant Factor**

Another factor that was found to be important according to the findings is the merchant factor. It consists of variables including website design, shop interface, usefulness, communication, responsiveness, delivery time, customer services, and reputation. The mean score of the merchant factor was 4.06 (SD=.566) and it is in line with the overall mean of the five factors (M=4.03).



This represents the agreement in which the consumers believe the merchant factor is influential to their decision to purchase online. The merchant factor was not found to be directly significant to the online purchase measure. However, it was proved to have significant positive relationship with other factors including product ( $r=.528, p\leq.01$ ); social ( $r=.396, p\leq.01$ ); and convenience ( $r=.343, p\leq.01$ ). This indicate that although the merchant factor does not have direct relationship with the online purchase measure, it still can have a big role in influencing the online shoppers in that its correlation with the other factors indicate it can significantly influence the consumer's perception of another factor. As mentioned in the study by Korgaonkar, Silverblatt, and Girard (2006), such an effect can influence the purchase decision of the online consumer. The merchant factor is also found to consistent as a factor that is influential to the online shoppers' decision to purchase online in the following studies: Jarvenpaa and Todd (1997); Prasad and Aryasri (2009); and Shen et al (2006).

Additionally, 59.6% of the consumers agree that they miss the ability to see and inspect the item before purchase when inquired about what the respondents miss the most about traditional shopping. This is a cause for concern to the marketers where strategies to be devised to include better product information, higher quality pictures, and the various technologies that are available to showcase the product better. Additionally, 21.0% of the respondents value the traditional shop's immediate receipt of item. This can be tied in closely to the variable in the survey, "Deliver items within time promised" where the consumers rated it with the second highest score amongst all variable analysed in the survey. Furthermore, other questions concerning delivery time inquired upon the participants on how many days they would expect to receive the item after purchase to which 58.2% expects to receive the item within 3-4 working days which indicate that the online shoppers are fair with their delivery time expectations.

All in all, the delivery time is of high importance to the online shoppers and with the competitiveness of online stores, consumers expect the merchants to dispatch promptly and offer a range of postage choices to suit the individual's buying needs. And as found in the study, the merchant factor can be influential to many of the other factors in that a well-designed website can help increase the consumers' perception of the other factors and in effect increase their likelihood to purchase from the online store. Retailers with a high street presence could also consider provide multi-channel integration in which items purchased online can be collected at the store located near the purchaser, since the biggest advantage to purchasing at a retail store is to gain immediate fulfilment of the purchase. This would be a benefit to the online shopper which could transpire into more purchases.

#### **4.4.7 Types of Buyers**

Lastly, the findings suggest that the three types of online shoppers (casual, regular, and frequent) perceive the convenience, social, risk, and product factors in a significantly different manner. Specifically, it was found that convenience was recognised as the top influencing factor to all three types of online purchasers. Overall, the finding indicates that the more often the online shopper purchases online, the more likely they are satisfied with the benefits of convenience, social, and product factors and less likely to be negatively affected by risk.

Hence, marketers should not devise generic marketing plans that assume consumers are affected equally by the factors and note that they are affected differently according to their online purchase experience. Specifically, a marketing plan can be devised to target the online consumers according to their individual attributes. By targeting and segmenting online consumers, the



marketers' marketing strategies can make use of the various marketing tools to achieve a better rate of return for their time, cost, and effort (Liebermann and Stashevsky, 2009).

Since casual purchasers are more concerned with risk, it is imperative for online retailers to build a safe shopping website environment for the users. Also, incentives such as 'money off' or 'free gift' for new customers is one way to attract new consumers to the business. Multi-channel strategy as discussed previously in this section is also an effective as well to reduce the potential risk involved with shopping online. It will be a challenge for marketers to try and convert the causal online shoppers into frequent online shoppers.

The Integrated Model of Factors Influencing the Online Consumers captures the factors and its relationships that can help practitioners improve their marketing strategies. The consumers' demographical characteristics, the five influential factors, the type of purchasers, and their significant relationships with each other all provide important information concerning the online consumer's perception of online shopping. The findings in this study can help marketers to better target their marketing efforts. Marketers should devise strategies to adapt and incorporate the findings into their marketing strategies so they can help improve the consumer's perception associated with online shopping and reduce the consumers' concerns and to ultimately influence the consumers' purchasing decision on the Internet.

#### **4.5 CHAPTER SUMMARY**

This chapter presented the qualitative and quantitative findings of the study. The data collected from the multi-methods were analysed to find patterns and relationships and were discussed. The findings from literature, semi-structured

interview, and online survey contributed to the development of the suggested model which captures the holistic view of the online shopping context. Finally, the chapter ended with a discussion of The Integrated Model of the Factors Influencing the Purchasing Decision of UK Online Consumers.

## 5 CONCLUSION and FUTURE WORK

### 5.1 CHAPTER OVERVIEW

This chapter discusses the findings stemming from the research questions and objectives for this study. A concluding summary of the research is then provided. Lastly, the contributions to knowledge and practice, limitations and future research will also be discussed.

### 5.2 RE-VISITING THE RESEARCH QUESTIONS AND OBJECTIVES OF THE STUDY

This study aimed to investigate and develop a better understanding of online consumer in the United Kingdom by finding out “what is important to consumers when shopping online?”. To accomplish this aim, the research questions formulated at the beginning of this study were:

Research Question 1: What is a suitable model of online consumer behaviour?

Research Question 2: What are the most important aspects and most prominent relationships that affect the online shoppers?

A set of objectives were then formulated to address these research questions. The formation of these objectives enabled the researcher to devise the appropriate research plan to address the research questions systematically and empirically. To address these research questions and their objectives, both qualitative and quantitative research methods were utilised and their findings ultimately lead to the development of the integrated model to offer a comprehensive view of the online consumer behaviour in the UK.

Objective 1: To critically review the factors which influence an online shopper's decision to purchase.

This was met during the early stage of this study from the critical review of the literature in Chapter 2. The existing literatures that were reviewed include traditional shopping theories; online shopping theories; gap in literature; and the various influences that affect online shoppers. This helped the researcher develop an understanding of the research area from the literature surrounding the online shopping context.

Objective 2: To develop a model based on the literature and data collected in the study.

By utilising mixed methods in this study, the triangulation analysis of the data (literature, semi-structured interviews and online survey) provides empirical evidence for the model to represent online consumer behaviour holistically. It provides suggests a number of factors that influence the consumers' perception and their relationships which could ultimately affect their decisions to purchase on the Internet. The suggested model contributes theoretically and practically to enhance the understanding of the online consumers.

Objective 3: To categorise these factors.

From reviewing, analysing, and conceptualising the literature, the researcher was able to categorise the influences that affect the online shoppers into four preliminary areas including: consumer characteristics, consumer perception, product/service characteristics, and merchant characteristics. Next, the primary

data findings from the exploratory phase (semi-structured interviews) further developed the categorisation of the influences into their respective factors. The triangulation of the results from semi-structured interviews with the theoretical findings from the literature review helped determine that there are five key factors that were supported as influential to the consumers' decision to purchase online. The resulting five influencing factors were: convenience, social, risk, product, and merchant factors. These factors were tested for their reliability by analysing their Cronbach's Alpha coefficients and it was determined that they have reliable internal consistency. The findings from the semi-structured interviews were then further extended to a larger population by way of an online survey (n=983). It was then reveal that the main influencing factors of convenience, social, risk, product, and merchant factors all scored >3.0, which represents the online consumers' agreement that these factors are perceived as important in influencing their decision to purchase online. Hence, this objective has been satisfied through the above mentioned steps.

Objective 4: To examine the relationships between these factors.

This objective was achieved in Chapter 4 through the use of various statistical analyses. The five factors were analysed to determine if there were any relationships between each other. A number of significant relationships were found between the factors and in terms of the positive relationships, as the perception of the value of one factor increases, the likelihood of another factor would increase as well. More importantly, the merchant factor was found to be correlated with many of the other factors. This finding is interesting in that although the merchant factor is important according to the consumers, it was not directly correlated with the online purchase measure. But since it has significant relationships with many of the other factors, the merchant factor can still be strong influentially on the online purchase measure. Furthermore, the demographic characteristics of the consumers were analysed on the five factors

to determine that there were a few notable significance that certain profile traits of consumers are more likely to be motivated by certain factor that marketers can use to target their marketing efforts.

Objective 5: To analyse the factors that have the most influence on online shoppers.

This objective was achieved through comparison of the mean scores of the factors in Chapter 4 to determine the consumers' perception of the level to which the factors influence their decision to purchase online. Convenience was found to be the highest scoring factor followed by merchant, product, social, and lastly risk factors. Convenience was determined to be the most influential factor in that all of the variables associated with this factor scored  $>4.0$  and scoring well above the overall mean score of the five factors, indicating this factors as the primary factor that motivates the online consumers. Furthermore, statistical analyses were conducted to determine the correlation between the five factors and the online purchase measure. It was discovered that there were positive relationships found between online purchase and the factors: product, convenience, and social factors which are in line with the findings from previous research. On the other hand, negative relationship was found between risk and online purchase, indicating risk is influential to the online shoppers' decision to purchase also but negatively. Furthermore, the demographic characteristics of the consumers were analysed with the online purchase measure to determine that those that spend more time on the Internet are significantly more likely to make more purchases.

Objective 6: To analyse if there are differences between different types of online shoppers.

This objective was satisfied by categorising the consumers into different types of online shoppers (casual, regular, and frequent online shoppers) based on their frequency of purchase and examining to find any differences in terms of their perceptions of the five factors. The analysis reported a significant difference between how casual, regular, and frequent online purchasers each perceive the convenience, social, risk, and product factors. The more often an online consumer purchase online, the more likely they value the benefits of convenience, social, and product factors while being less worried about the risk factor. Again, convenience factor was found to be the highest ranking factor for all three types of online purchasers, indicating convenience is a top influencing factor to all consumers. All in all, frequent purchasers have better perception of online shopping when compared to those that have less experience and thus, indicate that as the consumers' overall perception increases, the consumers are more willing to make online purchases.

### **5.3 RESEARCH SUMMARY**

An appropriate research plan was carefully planned out in order to satisfy the research aim and objectives of the research. This section will revisit each step by way of a concluding summary of the study.

#### **5.3.1 Research Aims, Questions and Objectives**

The thesis started off with an overview of the motivation for the study and a discussion of the gaps within the present literature. Due to the constant technological developments over the years, previous research has quickly become superseded. While some of the past studies have attempted to offer models of online shopping, they differ in their emphasis on different aspects of



online shopping. Hence, there is the necessity to offer a comprehensive integrated model of the factors that influence online shoppers in the UK. The aim of the research is to develop a better understanding of the online consumers in the United Kingdom. Based on this aim, the research questions and research objectives that were set for the study and include:

Research Question 1: What is a suitable model of online consumer behaviour?

RO1: To critically review the factors which influence an online shopper's decision to purchase.

RO2: To develop a model based on the literature and data collected in the study.

Research Question 2: What are the most important aspects and most prominent relationships that affect the online shoppers?

RO3: To categorise these factors.

RO4: To examine the relationships between these factors.

RO5: To analyse the factors that have the most influence on online shoppers.

RO6: To analyse if there are differences between different types of online shoppers.

To achieve the objectives, theoretical understanding of the existing literature in the research area was examined to develop an overview of the various determinants linked to online shopping. The literature was reviewed to explore traditional shopping theories; online shopping theories; gap in literature; and a range of possible influences that can affect online shoppers. Through the review of literature, the preliminary factors that influence online consumer behaviour have become apparent. The various factors associated with online customer behaviour have been integrated into four areas consisting of consumer characteristics, consumer perception, product/service characteristics, and

merchant characteristics for further research. Through the review, analysis, and conceptualisation of the literature, the conceptual framework was developed.

### **5.3.2 Research Methods and Exploratory Phase**

With the research framework developed, empirical data was needed to achieve the remaining objectives. After a review of the various research strategies, a mixed methods design was used to collect relevant data. The decision was influenced by the objective of developing an integrated model of the factors that affect the online shoppers and thus, a two phase mixed-method strategy was deemed most suitable. Qualitative data from semi-structured interviews was first collected and analysed, followed by a second phase of quantitative data collection and analysis that built on the results from the qualitative phase.

In order to collect the participants' thoughts, views and experiences associated with online shopping, semi-structured interviews were selected to carry out the task. The main reasoning for choosing this data collection technique was because its flexibility allows the researcher to adapt the questions during the interview, so that greater attention can be paid to significant issues dependant on the respondents' thoughts and views.

Phase 1 was separated into two stages of semi-structured interviews. Firstly, forty-one participants were targeted to obtain information about online shopping. The participants ranged from those who had never shopped online to those that are frequent online shoppers. This stage helped to identify the general issues and to conceptualise the key areas that are relevant and influential to the online shoppers. Next, a further twenty-eight participants were invited to comment on the interpreted findings and give a more in-depth discussion surrounding the general issues that were identified at the earlier stage.

After analysing the data and triangulating the data with the theoretical findings from the literature, themes emerged which provided a set of important factors and variables that are influential to online buyers. The resulting five influencing factors of convenience, social, risk, product, and merchant factors facilitated in the development of the online survey for the next phase.

The online survey was chosen as the other data collection technique for this research. This was intended to further explore the results from the literature review and semi-structured interviews that have been identified at the earlier phase of the study. By adding a quantitative phase to the study, the findings from the qualitative phase were able to be generalised to a large number of respondents and the findings from the study would then better represent the views of the wider population to ensure validity and reliability.

A sample of 1032 surveys was collected from the online survey (470 responses from MSE and 562 responses from the University of Bolton) and after data cleansing, the final usable responses was n=983. The sample was diversified in terms of age, gender, education, employment situation, income, and Internet and purchase experience.

### **5.3.3 Quantitative Phase and Findings**

The results collected from the online survey (n=983) were analysed with the Statistical Package for the Social Sciences (SPSS PASW 18). The statistical techniques that were used to analyse and explore the relationship of the groups and variables included the following: descriptive analysis; reliability analysis; comparing differences between groups using t-tests; analysis of variance (ANOVA); and correlation.

The findings in the study reveal the main influencing factors that affect the consumers' decision to purchase online. The factors are presented as convenience, social, risk, product, and merchant factors. Through the analysis of the data, there has been evidence to support the presence of a relationship between factors, a relationship between factors and online shopping, and the relationship between the consumers' demographics and the various factors. Furthermore, the findings suggest that the different types of online consumers (casual, regular and frequent) are not affected equally by the factors but rather, each type of consumers perceive the importance of each factor differently.

The findings in the study helped facilitate in the development of the Integrated Model of Factors Influencing the Online Consumers. The model integrates the findings from the literature, semi-structured interviews, and the online survey to capture the factors that influence the online shoppers. Furthermore, the relationships found between the factors and the significant variables provide useful information for marketers and practitioners which they can use to target their marketing effort to create a better purchasing experience for online consumers. This would ultimately lead to influencing the consumers' purchasing decision on the Internet.

#### **5.4 CONTRIBUTION TO KNOWLEDGE**

This study provides an important contribution to the advancement of existing knowledge in social sciences and marketing literatures by identifying and developing an integrated model that addresses the factors that influence the online consumers' purchasing decision. Past studies have attempted to identify different factors in studies associated with online shopping that differ in emphasis without a holistic understanding of online shopping with empirical

evidence. Their findings have become outdated due to the constant technological developments and the diversifying demographics of Internet users. This study contributes not only to the better understanding of the ever-growing area of online shopping, but also demonstrates a mixed method research strategy involving the use of both qualitative and quantitative primary data to provide a holistic understanding of the topic.

Literature was analysed to propose a research framework, which led to the collection of semi-structured interview data. After an initial analysis, a revised framework of factors was then developed and analysed statistically to extend these findings to the population. From the analysis of data from the online survey and together with the analysis from the semi-structured interviews, this study highlights the important factors that influence the online shoppers' decision to purchase which include convenience, social, risk, product, and merchant.

These important factors were analysed statistically and were found to be significant to the online consumers while also indicating the relationship between the factors and their influences on online shopping. Additionally, empirical evidence found that the demographic characteristics have an effect on the various factors. Furthermore, the analysis showed that there are significant differences in consumers' perspectives on the range of factors as their frequency of purchase experience increases. The outcome of the study was the development of an integrated model, consisting of the various factors that influence online shoppers, which adds value to the current research and provides empirical evidence on the influencing factors and their influence on online shoppers.

## **5.5 CONTRIBUTION TO PRACTICE**

The conceptual, exploratory, and empirical results found in this study provide a holistic understanding of the factors that influence online shoppers. The five factors investigated in this study are suggested to be influential to the online shoppers. They were analysed statistically to examine the significance and relationships between the factors and the online purchase measure to which a number of statistical significance was found between factors and online purchase; and between the factors itself. The level of importance specific to the different types of online shoppers, ranging from casual, regular, to frequent were also analysed in order to determine which statistical important result was found concerning the different types of buyers. Additionally, a profile of the general Internet shopper is provided along with demographical traits of consumers and their significant differences are highlighted. All in all, the results in this study can help practitioners facilitate their marketing activities and to develop appropriate strategies to make an impact on their exiting and/or potential consumers. The results from this study can be beneficial to practitioners marketing towards any type of online shoppers.

## **5.6 LIMITATIONS**

The data collected in this study focused on UK consumers and so the results may not be generalised to the worldwide online consumers. In order to extend the findings to other countries, a replicate of this study would be required. Also, convenience sampling was used in the study, which may be argued as not being as representative of the population as random sampling. A study with random sampling across UK could improve the reliability of the data even more.

## **5.7 FUTURE WORK**

Random sampling was not employed in this study and so future research could consider replicating this study with the random sampling technique. Since the data collected in this study came from UK respondents, this study could also be replicated in other countries to analyse if it is feasible to extend the findings of this research in an international context. Further research could also include an in-depth investigation of the social factor. With the number of consumers using social networks increasing exponentially, 'word of mouth' could become a more important influence factor affecting online consumers. Additionally, it would be worthwhile to consider examining the usage of mobile phones and other technologically advanced devices in purchasing online. This could significantly impact the behaviour of online shoppers.

## **5.8 CHAPTER SUMMARY**

This chapter started by re-visiting the research questions and objectives formulated from the beginning of the research and a discussion of the findings. A summary of the research was then provided. The chapter concluded with a discussion of the contributions to knowledge and practice, limitations and potential future research.



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## **6.1 APPENDIX A: Qualitative Questions**

### Sample Semi-structured Interview Questions

Have your online shopping experience so far been positive or negative? Please explain.

What do you consider as the benefits/risks of shopping online?

Can you expand on the main reason you shop/don't shop online?

Can you name a few types of items you will not buy online? Please explain.

What can an online store that you have never purchased from attract your custom?

What do you miss most about traditional shopping when compared to shopping online?

What do you think are the areas that online stores can improve on?

## 6.2 **APPENDIX B: Online Survey Questions**

Please base all your responses throughout this survey on purchases you made from online stores only (exclude eBay-type purchases).

### **Part 1 - Please complete the following questions**

#### **Q1a) In an average week, how many hours do you spend using the Internet?**

1-5 hours	
6-10 hours	
11-20 hours	
21-30 hours	
31-40 hours	
More than 40 hours	

#### **Q1b) For what personal purposes do you use the Internet? (Please choose all that applies)**

E-mail	
Shopping	
Social networking websites (e.g. Facebook, Twitter, and etc)	
News	
Entertainment	
Chat	
Blogs	
Researching Information	
Downloading software	
Other (Please specify):	

#### **Q1c) How many times have you purchased online for personal purposes in the last 12 months?**

1-5 times	
6-10 times	
11-20 times	

21-30 times	
31-40 times	
More than 40 times	

<b>Q1d) How much have you spent purchasing online for personal purposes in the last 12 months?</b>	
1-50 British pounds	
51-100 British pounds	
101-200 British pounds	
201-400 British pounds	
401-600 British pounds	
More than 600 British pounds	

<b>Q1e) What categories would you classify your personal purchases made online in the past 12 months? (Please choose all that applies)</b>	
Books	
Computer Software & Hardware	
Electricals & Appliances	
Entertainment (Music, Games, Movies)	
Fashion (Clothing and accessories)	
Financial Services	
Gadgets & Toys	
Groceries	
Mobile & accessories	
Travel	
Other (Please specify):	

<b>Part 2 - Please review the following statements and indicate whether you agree or disagree with them. (Please rate as 1= Disagree Strongly and 5= Agree Strongly)</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Q2a) I save time by shopping online					

Q2b) I find it convenient to shop online at anytime					
Q2c) It is easy to shop online					
Q2d) It is easy to compare products when shopping online					
Q2e) It is easy to compare prices when shopping online					

<b>Part 3 - Please review the following statements and indicate whether you agree or disagree with them. (Please rate as 1= Disagree Strongly and 5= Agree Strongly)</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Q3a) It is enjoyable to shop online					
Q3b) I have often been encouraged to shop online					
Q3c) I would recommend a website to others if I'm satisfied with my shopping experience at a particular website					
Q3d) Product reviews from other consumers are useful					
Q3e) Product reviews from experts are useful					
Q3f) I often check product reviews before I make a purchase.					

<b>Part 4 - Please review the following statements and indicate whether you agree or disagree with them. (Please rate as 1= Disagree Strongly and 5= Agree Strongly)</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Q4a) I am concerned about my security when purchasing online					
Q4b) I am concerned of my privacy when purchasing online					
Q4c) I am concerned about making the wrong purchase decision as I am unable to touch or examine the products before I make the purchase online					
Q4d) I am concerned that the items I purchase online would not arrive in time for my needs					
Q4e) I am concerned that the items I					



purchase online would be lost or damaged during the delivery					
Q4f) I am concerned about the shipping cost to return unwanted/unsuitable items					

<b>Part 5 - Please review the following statements and indicate whether you agree or disagree with them. (Please rate as 1= Disagree Strongly and 5= Agree Strongly)</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Q5a) I can usually find better prices when shopping online					
Q5b) I shop online because of the better prices					
Q5c) Promotions (e.g. sales, vouchers, gifts, etc) are attractive to me					
Q5d) I shop online because of the better promotions and discounts					
Q5e) Shopping online offers a wider selection of products/services to choose from					
Q5f) The product information is relevant and easy to understand					
Q5g) I can find detailed information about the product online					

<b>Part 6 - How important are each of the following when you purchase from a website? (Please rate as 1= Not Important and 5= Extremely Important)</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Q6a) The performance of the website meets my expectations					
Q6b) The website is easy to use					
Q6c) The website has a wide range of functionalities that enhance my shopping experience					
Q6d) A help section is useful to address most of my shopping questions					
Q6e) They are responsive to my questions and/or problems					
Q6f) They keep me informed of the order status					

Q6g) They deliver items within time promised					
Q6h) They have good after-sales service					
Q6i) The store's reputation is important					

<b>Part 7 – Please complete the following questions.</b>	
<b>Q7a) Which one of the following do you miss MOST about traditional shopping when compared to online shopping?</b>	
Can see and inspect the item before purchase	
Item is in your hand immediately after purchase	
Interacting with sales assistants/other shoppers	
No need to pay for shipping and return fees associated with online shopping	
Can choose between paying by cash, cheque, or card payments	
Physically visiting different stores to find deals and to look for what you want	
Other (Please specify):	

<b>Q7b) How many working days do you expect the item you purchased online to arrive after ordering?</b>	
1-2 business days	
3-4 business days	
5-6 business days	
7-9 business days	
10-14 business days	

<b>Part 8 - BACKGROUND INFORMATION</b>	
Please provide the following demographic information.	
<b>8a) What is your gender?</b>	
Male	
Female	

<b>8b) How old are you?</b>
-----------------------------

Under 24 years old	
25-34 years old	
35-44 years old	
45-54 years old	
Over 54 years old	

<b>8c) What is your marital status?</b>	
Not Married	
Married	

<b>8d) Which one of the following BEST represents the highest level of education that you have completed?</b>	
Doctorate Degree	
Postgraduate Degree	
Bachelor Degree	
Further Education (e.g. College)	
A Level	
GCSE/O-Level	
Other (Please specify):	

<b>8e) Which one of the following ethnic groups would BEST represent yourself?</b>	
White	
Asian or Asian British	
Black or Black British	
Chinese or Chinese British	
Other (Please specify):	

<b>8f) Which one of the following BEST describes your employment situation?</b>	
Student	
Employed part-time	
Employed full-time	

Unemployed, seeking employment	
Unemployed, not seeking employment	
Self-employed	
Retired	

<b>8g) IF EMPLOYED, which one of the following BEST describes your annual salary in the past 12 months? (Please respond only if you are employed)</b>	
Less than 10,000 British pounds	
10,000-19,999 British pounds	
20,000-29,999 British pounds	
30,000-39,999 British pounds	
40,000-49,999 British pounds	
50,000-75,000 British pounds	
Over 75,000 British pounds	

<p>If you wish to receive a summary of these results or wish to participate in this study's future research, please enter your email address:</p> <p>_____</p>
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<p>Thank you for your participation.</p>
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### **6.3 APPENDIX C: Online Survey Cover Page**

#### **Welcome!**

This PhD research is being conducted at the University of Bolton and the study focuses on the behaviour of online shoppers.

The purpose of the survey is to discover more about your thoughts relating to online shopping. I would be grateful if you would kindly spend some time to complete this survey. Your response is anonymous, completely confidential, and strictly for academic purposes.

A summary of the results will be made available to all participants upon completion of the study. If you have questions, please contact Vincent Lui at [vl1lis@bolton.ac.uk](mailto:vl1lis@bolton.ac.uk)

**[Click here to enter the survey](#)**

#### 6.4 **APPENDIX D: Online Survey Ending Page**

Your response has been received. Thank you!

Please help forward this survey to your network of friends and family.

If you wish to obtain more information about this study, please contact:

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